City of Las Vegas Fire Code

2016 Supplemental Documents Completing the 2012 Fire Code Amendments of the City of Las Vegas, Nevada

PREFACE

This Supplemental document was developed by Las Vegas Fire & Rescue containing certain parts, sections, and subsections of the International Fire Code 2012 and 2015 Editions, and the Southern Nevada Fire Code *(IFC).*

The City of Las Vegas has further amended the 2012 International Fire Code *(IFC)* and supplemental document by removing language that may be duplicative within the International Building Code *(IBC)* and specific expertise in the subject matter).

Items in Blue text will be the final adopted version either reflected as base code language or modified by this supplemental code. Language in black strike-through will be removed.

Table A

The following table (A) represents a graphical representation of all of the code sections and the justifications as expressed within the document.

Items in **BOLD** are modifications made to reduce or eliminate duplicative, conflicts or differences in the Building and Fire Code or to completely remove the prescriptive requirement from enforcement.

Section	Section Title	Justification
105	105.3.1 Expiration	Deletes SNFC general statement indicating an expiration date for a Temporary permit 180 days after issuance. Base Code sufficiently addresses the item
105	105.6.2 Amusement Buildings	Deletes SNFC amendment for expiration date for amusement buildings. Use is temporary in nature and is reflected on Operational permit. Base Code sufficiently addresses the item
105	105.6.8 C02 System permits	Added an operational permit for a C02 system for beverage dispensing from the 2015 IFC. Base code did not address.
105	105.6.27 LP Gas	Deletes SNFC amendment language as base Code sufficiently addresses the item
105	105.6.32 Open Flames and Candles	Deletes SNFC amendment language as base Code sufficiently addresses the item
105	105.6.47-105.6.51 Fire Protection System Operational permits	Deletes base code items in their entirety as they create an undue additional cost to the customer.
105	105.4.54-105.6.57 Fire Protection System Operational permits	Deletes base code items in their entirety as they create an undue additional cost to the customer.
105	105.6.61 Battery Systems	Added an operational permit for hazard not addressed in base code
105	105.6.32 Commercial BBQ	Deletes SNFC amendment language in its entirety as code creates an undue additional cost to the customer.
105	105.7.3 Compressed gasses	Deletes CLV amended code as base code sufficiently addresses the item
105	105.7.4 Cryogenic Fluids	Deletes SNFC amendment language in its entirety as code creates an undue additional cost to the customer.
105	105.7.6 Fire Alarm	Revised permit requirement for replacement of recalled components
105	105.7.11LP Gas	Deletes CLV amendment language and refer to currently adopted fire code.
105	105.7.12 Private Fire Lines	Deletes CLV amendment language and refer to currently adopted fire code.
105	105.7.17 Access Gates	Deletes SNFC amendment and refer to currently adopted fire code.
105	105.7.18 Access roads	Deletes CLV amendment in its entirety as other city departments issue installation permits for such
105	105.7.20 Self-Monitoring	Deletes in its entirety as CLV does not allow self-monitoring
105	105.7.21 Heliports, helistops	Deletes CLV amendment as other city departments issue installation permits for such
105	105.7.22 Refrigeration systems	Deletes CLV amendment as other city departments issue installation permits for such
105	105.7.26 Water Tanks	Delete SNFC in its entirety as such are part of a fire protection system that is required to be permitted.
105	105.27 C02 Systems	Added a construction /installation permit for hazard not addressed in base code
202	**Definitions**	**Added Definition for Retail and Wholesale and Temporary Stage Canopy in to the code as one does not exist.**
202	**Definitions**	**Helistop/Heliport Removed from IBC – No action in Fire Code**
307	307.2 Open Burning	Deletes SNFC amendment language as base Code sufficiently addresses the item
307	307.4 Open Burning	Deletes SNFC amendment language as base Code sufficiently addresses the item
307	**307.4.4 Commercial Barbecue**	**Deletes SNFC amendment language as base Code sufficiently addresses the item. (Conflict with IBC)**

322	**322.7-322.8 Motion Picture**	**Delete the SNFC code language term "Code official" to reduce possible (Conflict with IBC)**
322	**322.10.4 Motion Picture**	**Deletes SNFC amendment language in its entirety to reduce possible conflict with IBC**
314	314.4 Indoor vehicle display	Deletes SNFC amendment language as base Code sufficiently addresses the item
401	401.3.2 Alarm Activations	Deletes SNFC amendment language as base Code sufficiently addresses the item
503	**503.6.1 Access gates**	**Deletes SNFC amendment as other city departments (Building & Safety) issue installation permits for such.**
604	**604.2.15.2.1 Emergency Power Loads**	**Deletes Base Code IFC amendment language in its entirety to reduce possible conflict with IBC/NFPA 70**
606	**606.1, 606.5, 606.6, 606.7, 606.11**	**Deletes SNFC amendment language as base Code sufficiently addresses the item in regards to adopted code**
803	**803.9 Site Fabricated systems**	**Deletes Base Code IFC amendment language in its entirety to reduce possible conflict with IBC**
807	807.1 Decorative materials	Deletes SNFC amendment language as base Code sufficiently addresses the item
807	807.4.1 Explosive or highly flammable material	Deletes SNFC amendment language as base Code sufficiently addresses the item
809	**809 Fiber reinforced Polymer**	**Add CLV amendment to the IFC and refer to IBC for code consistency**
901	901.2.2.5 Hazardous materials	Deletes SNFC amendment language as base Code sufficiently addresses the item in code section 104.7.2
901	901.6.2 Records	Deletes SNFC amendment language as base Code sufficiently addresses the item in code and Nevada revised Statue and Nevada Administrative code
901	901.6.4 Licensing	Deletes SNFC amendment language as base Code sufficiently addresses the item in code and Nevada revised Statue and Nevada Administrative code
901	901.10	Deletes SNFC amendment language as base Code sufficiently addresses the item
903	903.2.8.3.3 Mitigation Matrix	Add CLV amendment that provides more clarification for what type of suppression system shall be installed within SFD based on operational constraints
903	903.2.9	Deletes CLV amendment language as base Code sufficiently addresses the item
903	903.2.11.7 Storage Height	Add CLV amendment that provides more clarification for what type of suppression system shall be installed within a high fire load shell building.
903	**903.3.1.3.1 Draft stopping**	**Add CLV amendment language for fire blocking and draft stopping to be in accordance with 703.1 IBC**
903	**903.3.1.3.2 Draft stopping**	**Add CLV amendment language for fire blocking and draft stopping to be in accordance with 703.1 IBC**
903	903.4 Valve supervision	Deletes SNFC amendment language as base Code sufficiently addresses the item.
903	903.4.1 Sprinkler system monitoring	Revise SNFC amendment to clarify when and how a fire protection system is to be monitored and signals transmitted to central station.
903	90.6.5 Sprinkler Design	Delete SNFC/CLV amendment in its entirety as the section is not charging language but design.
903	903.7 Existing buildings	Delete SNFC/CLV in its entirety as this section is duplicate to 903.6
903	**903.7.1.2**	**Language revised to be consistent with the IBC/SNBO**
907	907.6.3.1 Alarm annunciator	Delete CLV amendment in its entirety and revert back to SNFC language.
907	907.6.5 Monitoring	Revise SNFC amendment to clarify when and how a fire alarm system is to be monitored and signals transmitted to central station.
907	907.8.5.1 Fire alarm System replacement	Add CLV amendment to provide clarification for when and how a fire alarm system shall be installed.
909	**909.21**	**Add CLV Amendment language for elevator pressurization alternative as reflected in the IBC for correlation**
909	**909.22**	**Add CLV Amendment language for elevator pressurization alternative as reflected in the IBC for correlation**

910	910.3.1-910.3.3 Smoke Vents	Delete SNFC amendment language as base code sufficiently addresses the items.
913	913.1.2 Fire Pump	Delete SNFC amendment language as base code sufficiently addresses the item and CLV does not enforce such currently.
Chapter 10	**1001-1029.5.2 Means of Egress**	**Delete fire code section proposed to be removed is intended to Push any enforcement to the IBC/SNBO for requirements. This is intended to reduce any possibility of conflict.**
Chapter 11	**1101.1-1105.1.2**	**Delete entire code section in its entirety as such retroactive requirements are not enforceable as it is not adopted by the Nevada State Fire Marshal.**
1103	1103.7 Fire Alarm	Delete CLV amendment in its entirety from this section as such retroactive requirements are not enforceable as it is not adopted by the Nevada State Fire Marshal. Has been placed within Chapter 907.
2007	2007.1 Heliports/Helistops	Delete SNFC amendment in its entirety and revert back to base code. NFPA 418 has been adopted as part of this code.
2306	2306.2.3 Above/below ground tanks	Delete CLV amendment in its entirety and revert back to base code as CLV muni code sufficiently address the item
2311	**2311.4 Below Grade**	**Delete fire code section in its entirety. It intended to push any enforcement to the IBC/SNBO for requirements. This is intended to reduce any possibility of conflict.**
2311	**2311.7 Repair Garage**	**Delete fire code section in its entirety. It intended to push any enforcement to the IBC/SNBO for requirements. This is intended to reduce any possibility of conflict.**
2404	2404.2 Spray Finishing	Delete SNFC amendment in its entirety and revert back to base code as base Code sufficiently addresses the item.
3201	3201.3 Construction Documents	Delete SNFC amendment in its entirety and revert back to base code as base code sufficiently addresses the item.
3208	3208.2.2 Racks/shelving	Delete SNFC amendment in its entirety and revert back to base code. Refer to Industry advisory.
5001	5001.4 Wholesale storage	Delete SNFC amendment in its entirety and revert back to base code as base code sufficiently addresses the item.
5001	5001.5.1 Hazardous Materials plan	Delete SNFC amendment in its entirety and revert back to base code as base code sufficiently addresses the item.
5001	5001.5.2 Hazardous Materials Statement	Delete SNFC amendment in its entirety and revert back to base code as base code sufficiently addresses the item.
5003	5003.5.1-5003.5.2 Signage/Markings	Delete SNFC amendment sections in their entirety and revert back to base code as base Code sufficiently addresses the item.
5003	5003.8.3.5 retail and wholesale amounts	Delete SNFC amendment in its entirety and revert back to base code as base Code sufficiently addresses the item.
5003	5003.8.8 Haz Mat storage	Delete SNFC amendment in its entirety and revert back to base code as 5002.9.1.1 contains such provisions.
5003	5003.11 Group M storage	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5301	5301.1 C02 gas	Delete SNFC amendment in its entirety and refer to New Section 5307.3
5306	5306.5-5306.5 Medical gas Systems	Delete SNFC amendments in its entirety and revert back to base code as base Code sufficiently addresses the item.
5307	5307.3 C02 Systems	Add CLV code section form 2015 IFC to address C02 systems for beverage dispensing
5601	5601.1.2.2 Fireworks	Delete SNFC amendment in its entirety and revert back to base code as base code, local and County codes sufficiently addresses the item.
5601	5601.2.4	Delete SNFC amendment in its entirety and revert back to base code as base code, local and County codes sufficiently addresses the item.
5601	5601.2.4.1 Blasting	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5601	5601.2.4.2 Fireworks display	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5601	5601.5 Fireworks Supervision	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.

5603	5603.8 Blasting reports	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5604	5604.1 Explosive storage	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item. Planning and Zoning regulates such locations.
5604	5604.6.5 Signs/Placards	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5604	5604.6.5.2 Signs/Placards	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5604	5604.7.1 Site Security	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5605	5605.1 Manufacture of fireworks/blasting	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item along with Planning and Zoning regulation.
5607	5607.3.2 Blasting permits	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5607	5607.4 Blasting hours	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item and Temporary permit will specify the times as part of the approval.
5607	5607.5 Blasting utility notification	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5607	5607.6 Blasting electronic detonator	Delete SNFC amendment in its entirety and revert back to base code as base Code sufficiently addresses the item.
5607	5607.13 pre-blasting	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item and Temporary permit will specify the times as part of the approval.
5607	5607.14 Post blasting	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item and Temporary permit will specify the times as part of the approval.
5608	5608.1Fireworks display	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item and Temporary permit will specify the times as part of the approval.
5704	5704.2.9.6.1 Above ground tanks	Delete CLV amendment in its entirety and revert back to base code as code sufficiently addresses the item. Planning and Zoning regulates such locations.
5704	5704.5 Generators	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item. Other NFPA/UL standards apply
5706	5706.2.4.4 Above ground tanks	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item. Planning and Zoning regulates such locations.
5706	5706.5.1.6 Class I/II fire protection	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item.
5806	5806.2 Cryogenic limits	Delete SNFC amendment in its entirety and revert back to base code as code sufficiently addresses the item. Planning and Zoning regulates such locations.
6101	6101.2.1 LPG tanks	Delete CLV amendment in its entirety and revert back to base code as code sufficiently addresses the item. Planning and Zoning regulates such locations.
6104	6104.2 LPG quantities	Delete CLV amendment in its entirety and revert back to base code as code sufficiently addresses the item. Planning and Zoning regulates such locations.
Chapter 80	418-16 Heliports	Add Referenced standard to code adoption
Chapter 80	400-Hazardous Materials Code	Add Referenced standard to code adoption
Appendix	Appendix B104.2 Area Separation	Delete CLV amendment in its entirety and revert back to SNFC code as code sufficiently addresses the item
NFPA 13	3.3.25, 3.2.26, 3.3.27 Definitions	Add CLV Definitions to NFPA standard to clearly define accessibility to systems and spaces for operational staff.
NFPA 13	8.15.7.2 Exterior projections	Delete CLV amendment in its entirety and revert back to SNFC code as code sufficiently addresses the item
NFPA 13	8.15.7.4 Exit corridors	Delete CLV amendment in its entirety and revert back to base standard language code as code sufficiently addresses the item
NFPA 13	8.17.4.2.5 Inspector Test	Delete CLV amendment in its entirety with no new code language.
NFPA 13	22.38 Protection matrix	Delete CLV amendment in its entirety and revert back to SNFC standard

		language as item is sufficiently addresses the item
NFPA 13	22.38.2 Design Criteria	Delete CLV amendment in its entirety and revert back to SNFC standard language as item is sufficiently addresses the item
NFPA 13D	8.4 Group R-4 Matrix	Delete CLV amendment in its entirety and revert back to SNFC standard language as item is sufficiently addresses the item
NFPA 13R	1.1 Scope	Delete CLV amendment in its entirety and revert back to SNFC standard language as item is sufficiently addresses the item
NFPA13 R	7.6 Group R-3 Matrix	Delete CLV amendment in its entirety and revert back to SNFC standard language as item is sufficiently addresses the item
NFPA 14	7.2.4 Pressure Regulating	Delete CLV amendment in its entirety and revert back to SNFC standard language as item is sufficiently addresses the item
NFPA 72	10.10.1 Conflicting sounds/distractions	Add CLV amendment to clarify when conflicting sounds and visual distractions shall be eliminated.
NFPA 72	18.5.5.8 Visual Appliances	Delete CLV amendment in its entirety and revert back to SNFC standard language as item is sufficiently addresses the item

Table of Contents

International Fire Code

105.3.1

Delete the amended Section 105.3.1 in its entirety and refer to the currently adopted fire code.

~~105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed, or revoked or for such a period of time as specified in the permit, not exceeding one year from date of issuance. Construction permits shall automatically become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work recommences, a new permit shall be first obtained and the fee to recommence work, if any, shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year. Permits are not transferable and any changes in occupancy, operation, tenancy or ownership shall require a new permit to be issued.~~

105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed, or revoked or for such a period of time as specified in the permit. Construction permits shall automatically become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work recommences, a new permit shall be first obtained and the fee to recommence work, if any, shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year. Permits are not transferable and any changes in occupancy, operation, tenancy or ownership shall require a new permit to be issued.

105.6.2

Delete the amended Section 105.6.2 in its entirety and refer to the currently adopted fire codeas follows:

~~105.6.2 Amusement buildings. An operational permit is required to operate a special amusement building. both permanent and temporary special amusement buildings. Permanent special amusement building permits shall have duration in accordance with Section 105.3.1. Temporary special amusement buildings permits shall have a duration of 60 days or less.~~

105.6.2 Amusement buildings. An operational permit is required to operate a special amusement building.

105.6.8

Add Section 105.6.8 (a.) under table 105.6.8

a. An Operational permit is required for Carbon Dioxide systems used on beverage dispensing applications having more than 100 pounds of carbon Dioxide.

105.6.27

Delete the amended Section 105.6.27 in its entirety and refer to the currently adopted fire code as follows:

~~105.6.27 LP-gas. An operational permit is required for:~~

~~1. Storage and use of LP-Gas~~

~~Exceptions:~~
~~a. An operational permit is not required in Group R-3 occupancies and buildings constructed in accordance with the IRC.~~

~~b. An operational permit is not required for individual containers with a 30-gallon (113.6 L) water capacity or less or multiple containers having an aggregate quantity not exceeding 30 gallons (113.6 L).~~

~~2. Operation of cargo tankers that transport LP-gas~~

105.6.27 LP-Gas. An operational permit is required for:

2. Storage and use of LP-Gas

Exception:
A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple containers having an aggregate quantity not exceeding 500 gallons (18936 L) service occupancies in Group R-3..

2. Operation of cargo tankers that transport LP-Gas

105.6.32

Delete the amended Section 105.6.32 in its entirety and refer to the currently adopted fire code as follows:

~~**105.6.32 Open flames and candles. An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurant or drinking establishments. Annual permits for open flames and candles that are periodically used at facilities are acceptable where the permit application provides all conditions surrounding the use of the particular open flames or candles. This annual permit allows a facility to use preapproved open flames and candles repeatedly throughout the year.**~~

105.6.32 Open flames and candles. An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurant or drinking establishments.

105.6.47 – 105.6.51

Delete the amended sections 105.6.47 -105.6.51 in their entirety.

~~105.6.47 Emergency responder radio coverage system. An operational permit is required to operate an emergency responder radio coverage system regulated by Chapter 5.~~

~~105.6.48 Filming. An operational, permit is required to film, or broadcast at a public studio, production location, or sound stage. See Section 322.~~

~~105.6.49 Fire Pumps. An operational Permit is required for facilities that contain a fire pump. See Chapter 9 and NFPA 20.~~

~~105.6.50 Fire Suppression and Extinguishing Systems. An operational permit is required for facilities that contain a fire suppression or extinguishing system. See Chapter 9.~~

~~105.6.51 Firewood. An operation permit is required to store firewood in excess of 50 cords. See chapter 28~~

105.6.54 – 105.6.57

Delete the amended sections 105.4.54 -105.6.57 in their entirety

~~105.6.54 Monitoring facilities. An operational permit is required for any facility that remotely monitors electronic signals initiated by fire protection systems such as central or supervising stations.~~

~~105.6.55 Proprietary / Self-Monitoring. An operational permit is required to operate an onsite proprietary (Self) monitoring fire alarm system. See Appendix K~~

~~105.6.56 smoke Control System. An operational permit is required for facilities that have smoke control systems~~

~~105.6.57 smoke removal System. An operational permit is required for facilities that have smoke removal systems~~

105.6.61

Add Section 105.6.61 to read as follows:

105.6.61 Battery Systems. An operational permit is required for stationary lead-acid battery systems having a liquid capacity of more than 100 gallons in sprinklered buildings, or 50 gallons in non-sprinklered buildings. See Section 608

105.6.62

Delete Section 105.6.62 in its entirety

~~105.6.62 Commercial Barbeques. An operational permit is required for a commercial barbecue in a fixed outdoor location, as referred to in Section 307.4.4 of the Southern Nevada Amendments.~~

105.7.3

Delete the amended Section 105.7.3 exception in its entirety and refer to the currently adopted fire code as follows:

~~105.7.3 Compressed Gases. When the compressed gases in use or storage exceed the amounts listed in Table 105.6.8, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service or close or substantially modify a compressed gas system.~~
~~Exceptions:~~

1. ~~Routine Maintenance~~
2. ~~For emergency repair work performed on an emergency basis application for permit shall be made within two working days of commencement of work.~~

~~Exception: Level 3 compressed air and/or piped vacuum systems as defined by NFPA 99, Standard for Health Care Facilities.~~

105.7.3 Compressed Gases. When the compressed gases in use or storage exceed the amounts listed in Table 105.6.8, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service or close or substantially modify a compressed gas system.

Exceptions:

3. **Routine Maintenance**
4. **For emergency repair work performed on an emergency basis application for permit shall be made within two working days of commencement of work.**

105.7.4

Delete Section 105.7.4 in its entirety and refer to the currently adopted fire code

~~105.7.4 Cryogenic fluids. A construction permit is required for installation of or alteration to stationary cryogenic fluid storage systems and for fog effect systems that utilize CO2 or cryogenic fluids where the system capacity exceeds the amounts listed in Table 105.6.8 or Table 105.6.10. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.~~

105.7.4 Cryogenic fluids. A construction permit is required for installation of or alteration to outdoor stationary cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 105.6.10. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.6

Revise Section 105.7.6 as follows:

105.7.6 Fire Alarm and Detection systems and related equipment. A construction permit is required for installation, replacement of recalled components or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with the code is not considered a modification and does not require a permit.

105.7.11

Delete the amended Section 105.7.11 in its entirety and refer to the currently adopted fire code

~~105.7.11 LP-Gas. A construction permit is required for the installation of or modification to an LP-Gas system.~~

~~Exception: Installations with an aggregate water capacity of less than 288 gallons (1090L) serving one- and two family dwellings~~

105.7.11 LP-Gas. A construction permit is required for the installation of or modification to an LP-Gas system.

105.7.12

Delete the amended Section 105.7.12 in its entirety and revert back to base code

~~105.7.12 Fire Hydrants and Associated Supply Piping. Fire code official approval is required for the installation or modification of fire hydrants, including temporary hydrants, and the associated supply piping. The fire code official may require construction permits for this activity.~~

105.7.12 Private Fire Hydrants. Construction permit is required for the installation or modification of private fire hydrants.

105.7.17

Delete the amended Section 105.7.17 in its entirety. No base IFC requirement. Falls within Building Code

105.7.17 Access Gates. A construction permit is required for the installation of or modification to each access gate (including both manual and automatic gates) obstructing a fire apparatus access road. See Chapter 5.

105.7.18

Delete the Section 105.7.18 in its entirety

~~105.73.18 Fire apparatus access road plan. A construction permit is required for the installation of or modification to a fire apparatus access road required for access to a protected premise. See Chapter 5 and Appendix C~~

105.7.20

Delete Section 105.7.20 in its entirety

~~105.7.20 Proprietary (Self) Monitoring facilities. The Fire Code official is authorized to require a construction permit for the installation of or modification to an onsite proprietary (Self) monitoring facility. See Appendix K.~~

105.7.21

Delete Section 105.7.21 in its entirety

~~105.7.21 Heliports, Helistops, and Emergency Landing Pads. A construction permit is required for the installation of or modification to a heliport, helistop, and /or emergency landing pad. See Chapter 20 and NFPA 418.~~

105.7.22

Delete Section 105.7.22 in its entirety

~~105.7.22 Refrigeration systems. A construction permit is required for the installation of a mechanical refrigeration system covered by Section 606.~~

105.7.26

Delete Section 105.7.26 in its entirety

~~105.7.26 Water Tanks. A construction permit si required for the installation of or modification to a water tank used for supply of a fire protection system. See Chapter 9 and NFPA 22.~~

105.7.27

Add section 105.27 Carbon Dioxide systems used for beverage dispensing as follows.

105.7.27

A construction permit is required for installation of a Carbon Dioxide system for Beverage Dispensing system. Maintenance performed in accordance with this code is not considered an alteration and does not require a permit.

202

Add definition as follows:

RETAIL AND WHOLESALE. The sale of new or used goods to: consumers; retailers; industrial, commercial, institutional or professional users; or to other wholesalers.

TEMPORARY STAGE CANOPY. A temporary ground supported membrane-covered frame structure used to cover stage areas and support equipment in the production of outdoor entertainment events.

307.2

Delete amended Section 307.2 in its entirety and revert back to adopted code language

~~307.2 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, or prevention or control of disease or pests. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.~~

307.2 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, or prevention or control of disease or pests, or a bonfire. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

307.4

Delete amended Section 307.4 in its entirety and revert back to base code language

~~307.4 Location. The location for open burning shall not be less than 50 feet (15 240 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 50 feet (15 240 mm) of any structure.~~
~~Exceptions:~~
~~1. Fires in approved containers that are not less than 15 feet (4572 mm) from a structure.~~

~~2. The minimum required distance from a structure shall be 25 feet (7620 mm) where the pile size is 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.~~

~~3. One and two family dwellings utilizing LPG or natural gas fuels when installed under a construction permit issued by the building code official~~

307.4 Location. The location for open burning shall not be less than 50 feet (15 240 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 50 feet (15 240 mm) of any structure.

Exceptions:

1. Fires in approved containers that are not less than 15 feet (4572 mm) from a structure.

2. The minimum required distance from a structure shall be 25 feet (7620 mm) where the pile size is 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.

307.4.4

Delete Section 307.4.4 in its entirety

~~307.4.4 Commercial Barbeque. Barbecue pits used for commercial cooing operations in buildings shall be constructed as commercial food heat-processing equipment in accordance with the Mechanical Code. See also Section 904. Barbeque pits in outdoor locations shall be constructed of concrete or approved noncombustible materials and shall not be located within 10 feet (3048mm) of combustible walls or roofs or other combustible material.~~

314.4

Delete amended Section 314.4 in its entirety and revert back to base code language

~~314.4 Vehicles. Liquid- or gas-fueled vehicles, aircraft, boats or other motorcraft shall not be located indoors except as follows:~~

~~1. Batteries are disconnected or the engine starting system is made inoperable.~~

~~2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least)~~

~~3. Fuel tanks and fill openings are closed and sealed to prevent tampering~~

~~4. Vehicles, aircraft, boats or motorcraft equipment are not fueled or defueled within the building.~~

314.4 Vehicles. Liquid- or gas-fueled vehicles, aircraft, boats or other motorcraft shall not be located indoors except as follows:

1. Batteries are disconnected.

2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least)

3. Fuel tanks and fill openings are closed and sealed to prevent tampering.

4. Vehicles, aircraft, boats or motorcraft equipment are not fueled or defueled within the building.

322.7

Delete term "Code Official" from amended Section 322.7 to reduce potential conflict with IBC

322.10

Delete amended Section 322.10 in its entirety

~~322.10 Heat Detectors. Where heat detectors are installed to mitigate sprinkler obstructions, the heat detector system shall be installed in accordance with this code except as otherwise specified in this section.~~

~~322.10.1 Fire Alarm Panels. Fire Alarm panels shall be utilized in accordance with their listing. Panels may be temporarily supported by sets, platforms, or pedestals, for temporary sets which will be erected for less than 180 days. Page 37~~

~~322.10.2 Notification. The fire alarm panel shall be connected to an approved listed central, proprietary, or remote station service, and a local alarm which will give an audible signal to a constantly attended location such as a~~

~~security post.~~

~~322.10.3 Heat Detectors. Heat detectors required by this section shall be defined as a portable system as it is intended to be reinstalled when platforms or sets are changed, and after filming has been completed for the day. Heat detectors shall be secured to standard outlet boxes, which may by temporarily supported by sets, platforms, or pedestals.~~

~~322.10.4 Wiring. Wiring for temporary (less than 180 days) or portable fire alarm systems do not have to meet the requirements of NEC 300.1 as revised locally.~~

401.3.2

Delete amended Section 401.3.2 in its entirety and revert back to base code language

~~401.3.2 Alarm activations. Upon activation of a water flow signal, employees or staff shall immediately notify the fire department.~~

~~Exception: For approved proprietary supervising station systems (self-monitoring systems), the fire department shall be notified as required by the fire code official~~

401.3.2 Alarm activations. Upon activation of a fire alarm signal, employees or staff shall immediately notify the fire department.

503.6.1

Delete the amended Section 503.6.1 in its entirety

~~503.6.1 Permit. A Fire Department installation permit is required to install a gate that obstructs a fire apparatus access road. A separate permit is required for each gated entrance.~~

604.2.15.2.1

Delete the amendment in its entirety from the base code and refer to Building Code.

~~604.2.15.2.1 Emergency power loads. The following loads are classified as emergency systems.~~

1. ~~Emergency voice/alarm communication systems~~
2. ~~Fire Larm systems~~
3. ~~Automatic fire detection systems~~
4. ~~Elevator car lighting~~
5. ~~*Means of Egress* lighting and *exit* sign illumination as required by Chapter 10~~

606.1-606..5.6.7.11

Delete the amended Sections 606.1,606.5,606.6,606.7 in their entirety.

~~606.1 Scope. Refrigeration systems shall be installed in accordance with the International Mechanical Code.~~

~~606.5 Access. Refrigeration systems having a refrigerant circuit containing more the 220 pounds (100Kg) of Group A1 or 30 pounds (14kg) of any other group refrigerant shall be accessible to the fire department at all times as required by the fire code official.~~

~~606.6 Testing of Equipment. Refrigeration equipment and systems having a refrigerant circuit containing more than the allowable quantity of refrigerant as stated in Table 11-1 of the Uniform Mechanical Code shall be subject to periodic testing in accordance with section 606.6.1. A written record of required testing shall be maintained on the premises. Tests of emergency devices or systems required by this chapter shall be conducted by persons trained and qualified in refrigeration systems~~

~~606.7 Emergency Signs. Refrigeration units or systems having a refrigerant circuit containing more than the allowable quantity of refrigerant as stated in Table 11-1 of the Uniform Mechanical Code shall be provided with approved emergency signs, charts, and labels in accordance with NFPA 704. Hazard signs shall be in accordance with the International Mechanical Code for the classification of refrigerants listed herein.~~

803.9

Delete Section in its entirety and refer to the Building code.

~~803.9 Site-Fabricated stretch systems. Where used as newly installed interior wall or interior ceiling finish materials, site-fabricated stretch systems containing all three components described in the definition in Section 802 shall be tested in the manner intended for use, and shall comply with the requirements of Section 803.1.1 or 803.1.2. If the materials are tested in accordance with ASTM E84 or UL 723, specimen preparation and mounting shall be in accordance with ASTM E2573.~~

807.1

Delete Section in its entirety and refer to adopted code as follows.

807.1 General requirements. In occupancies in Groups A, E, I and R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 806.2 or be noncombustible.

Exceptions:
1. Curtains, draperies, hangings and other decorative materials suspended from walls of sleeping units and dwelling units in dormitories in Group R-2 protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1 and such materials are limited to not more than 50 percent of the aggregate area of walls.

2. Decorative materials, including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are of limited quantities such that a hazard of fire development or spread is not present.

In Groups I-1 and I-2, combustible decorative materials shall meet the flame propagation criteria of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorative materials are prohibited.
Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered interior finish if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings. In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet the flame propagation performance criteria in accordance with Section 806.2 and NFPA 701 or shall be noncombustible. ~~In other than Group B and M occupancies, fabric partitions shall be in accordance with the type of construction required for the building.~~

807.1 General requirements. In occupancies in Groups A, E, I and R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 806.2 or be noncombustible.

Exceptions:

1. Curtains, draperies, hangings and other decorative materials suspended from walls of sleeping units and dwelling units in dormitories in Group R-2 protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1 and such materials are limited to not more than 50 percent of the aggregate area of walls.

2. Decorative materials, including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are of limited quantities such that a hazard of fire development or spread is not present.

In Groups I-1 and I-2, combustible decorative materials shall meet the flame propagation criteria of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorative materials are prohibited.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered interior finish if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings.

In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet the flame propagation performance criteria in accordance with Section 806.2 and NFPA 701 or shall be noncombustible.

807.4.1

Delete Section in its entirety and refer to adopted base code as follows.

~~807.4.1 General. All of the following requirements shall apply to all Group A and E occupancies and Group I-4 day care facilities regulated by Sections 807.4.2 through 807.4.4:~~

~~1. Explosive or highly flammable materials. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.~~

~~2. Fire-retardant coatings. Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.~~

~~3. Obstruction. Furnishings, draperies, hanging fabrics or other objects shall not be placed to obstruct exits, access thereto, egress therefrom or visibility thereof, and shall not obstruct fire protection and fire alarm devices and equipment, and shall not restrict the proper operation of such devices~~

807.4.1 General. All of the following requirements shall apply to all Group A and E occupancies and Group I-4 day care facilities regulated by Sections 807.4.2 through 807.4.4:

1. Explosive or highly flammable materials. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.

2. Fire-retardant coatings. Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.

3. Obstruction. Furnishings, or other objects shall not be placed to obstruct exits, access thereto, egress therefrom or visibility thereof.

901.2.2.5

Delete the amended Section 901.2.2.5 its entirety.

~~901.2.2.5 Hazardous materials, fog effects, and asphyxiants. Complex permits for hazardous materials, fog effects, and asphyxiants shall have fire protection reports submitted to address the hazards of the installation, as required by the fire code official~~

901.6.2

Delete amended Section 901.6.2 in its entirety and revert back to base code language

~~901.6.2 Records. Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of three years and shall be copied to the fire code official upon request.~~

~~Inspection reports shall mirror in form and content the most current NFPA inspection forms.~~

901.6.2 Records. Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of three years and shall be copied to the fire code official upon request.

901.6.4

Delete amended Section 901.6.24 in its entirety.

~~901.6.4 Contractor Licensing. Fire protection contractors/companies shall be licensed as required by the Nevada State Fire Marshal Regulations (NAC 477) and Nevada Revised Statutes (NRS). A valid Southern Nevada multijurisdictional business license is also required.~~

901.10

Delete amended Section 901.10 in its entirety and revert back to base code language.

~~901.10 Recall of fire protection components. Any fire protection system component regulated by this code that is the subject of a voluntary or mandatory recall under federal law shall be replaced with approved, listed components in compliance with the referenced standards of this code. A construction permit shall be obtained for the replacement of all recalled components.~~

903.2.9

Delete amended Section 903.2.9 item 6 in its entirety and revert back to base code language as follows:

~~903.2.9 Group S-1 An automatic sprinkler system installed in accordance with 903.3.1.3 shall be provided throughout all buildings containing a Group S-1 occupancy where one fo the following conditions exists:~~

1. ~~A Group S-1 fire area exceeds 12,000 square feet. (1115m^2)~~
2. ~~A Group S-1 fire area is located more than three stories above grade plane.~~
3. ~~The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m^2)~~
4. ~~A Group S-1 fire area used for the storage of commercial trucks or buses where the fire areas exceeds 5,000 square feet (464m^2)~~
5. ~~A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232m^2)~~

~~6. A Group S-1 fire area used for self-storage where the fire area exceeds 2,500 square feet (279m²)~~

903.2.9 Group S-1 An automatic sprinkler system installed in accordance with 903.3.1.3 shall be provided throughout all buildings containing a Group S-1 occupancy where one fo the following conditions exists:

1. **A Group S-1 fire area exceeds 12,000 square feet. (1115m²)**
2. **A Group S-1 fire area is located more than three stories above grade plane.**
3. **The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²)**
4. **A Group S-1 fire area used for the storage of commercial trucks or buses where the fire areas exceeds 5,000 square feet (464m²)**
5. **A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232m²)**

903.2.11.7

Revise 903.2.11.7 as follows:

~~903.2.11.7. Protection of available storage height. In Group S-1 and all other storage areas the fire sprinkler system shall be designed to protect storage up to the maximum available storage height. The minimum sprinkler density shall be equivalent to that required for a Class IV commodity pursuant to NFPA 13.~~

903.2.11.7. Protection of available storage height. In Group S-1 shell storage buildings and all other storage areas, the fire sprinkler system shall be designed to protect storage up to the maximum available storage height. The minimum sprinkler density shall be equivalent to that required for a Class IV commodity pursuant to NFPA 13.

903.3.1.3.1

Add Section as follows:

903.3.1.3.1 Draftstopping. Draftstopping in combustible concealed spaces shall be provided in Group R occupancies equipped in an automatic sprinkler system in accordance with NFPA 13D. Fire Blocking and draftstopping shall be in accordance with Section 703.1

903.3.1.2.2

Add Section as follows:

903.3.1.2.2 Draftstopping. Draftstopping in combustible concealed spaces shall be provided in Group R occupancies equipped in a n automatic sprinkler system in accordance with NFPA 13R. Fire Blocking and draftstopping shall be in accordance with Section 703.1

903.4

Delete amended Section 903.4 in its entirety and revert back to base code language

~~903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.~~

~~Exceptions:~~

~~1. Automatic sprinklers systems protecting one- and two-family dwellings~~

~~2. Limited area systems serving fewer than 20 sprinklers.~~

~~3. Automatic sprinklers systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.~~

~~4. Jockey pump control valves that are sealed or locked in the open position.~~

~~5. Control valves to paint spray booths or dip tanks that are sealed or locked in the open position.~~

~~6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.~~

~~7 Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position~~

903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinklers systems protecting one- and two-family dwellings

2. Limited area systems serving fewer than 20 sprinklers.

3. Automatic sprinklers systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.

4. Jockey pump control valves that are sealed or locked in the open position.

5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.

6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.

7 Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position

903.4.1

Revise SNFC Section 903.4.1 as follows:

~~903.4.1 Monitoring. Alarm, supervisory, and trouble signals shall be distinctly different and shall be automatically transmitted to an approved supervising station or, when approved by the fire code official, shall sound an audible signal at a constantly attended location.~~

~~Exceptions:~~

~~1. Underground key or hub valves are not required to be monitored.~~
~~2. Backflow prevention devices located at the municipal water supply connection are not required to be monitored when either locked in the open position, or are located within an underground vault or an approved insulated enclosure.~~

~~Systems that are not electrically monitored shall have an approved identification sign below each outside horn and strobe which reads "WHEN ALARM SOUNDS – CALL 9-1-1". This sign shall be of durable material with permanent lettering having a 2-inch minimum height with ½ inch stroke on a contrasting background.~~

~~Multi-story facilities shall provide zone annunciation on a floor-by-floor basis.~~

~~In occupancies provided with a supervised sprinkler system, the following three distinctly different signals shall be transmitted to an approved supervising station:~~

~~1. Water Flow Alarm~~
~~2. Supervisory~~
~~3. System Trouble~~

~~The supervising station shall only retransmit Water Flow Alarm signals to the Fire Department.~~

903.4.1 Monitoring. Alarm, supervisory, and trouble signals shall be distinctly different and shall be automatically transmitted to an approved supervising station.

Exceptions:

1. ***Underground key or hub valves are not required to be monitored.***
2. ***Backflow prevention devices located at the municipal water supply connection are not required to be monitored when either locked in the open position, or are located within an underground vault or an approved insulated enclosure.***

Multi-story facilities shall provide zone annunciation on a floor-by-floor basis.

In occupancies provided with a supervised sprinkler system, the following three distinctly different signals shall be transmitted to an approved supervising station:

1. **Water Flow Alarm**
2. **Supervisory**
3. **System Trouble**

The supervising station shall only retransmit Water Flow Alarm signals to the Fire Department.

903.6.4

Delete current language and revise as follows:

~~2. In all occupancies, sprinklers are not required to be provided beyond the fire area when the fire area is separated from the remainder of the building by a 4- hour rated fire walls constructed in accordance with section 707 of the International Building Code and without openings.~~

2. In all occupancies, sprinklers are not required to be provided beyond the fire area when the fire area is separated from the remainder of the building by a 2 hour fire barrier, constructed in accordance with Section 707 of the International Building Code.

903.6.5

Delete the amended Section 903.6.5 in its entirety

~~903.6.5 Fire Sprinkler system design in partially sprinklered buildings. The fire sprinklers system for partially sprinklered buildings shall meet the following design requirements.~~

~~1. The Sprinkler system shall be installed throughout the entire tenant space and accompanying adjacent combustible concealed spaces such as attics, soffits, mansards, etc. In accordance with Section 903.3.1.1~~

2. The automatic fire sprinkler system , underground fire service main, water meter and backflow prevention devices shall be sized to meet the necessary demand of NFPA 13 – Ordinary Hazard Group II design for future expansion of the fire sprinkler system to cover all other portions of the building.
3. A durable weatherproof signage shall be provided at the Fire Department Connection(s) clearly indicating that the building is partially protected with fire sprinklers and clearly identifying the portion(s) of the building covered by the fire sprinkler system.

903.7

Delete the amended Section 903.7 in its entirety.

903.7 Automatic Sprinklers in Existing Buildings. Automatic sprinkler systems in accordance with Section 903 and designed per the Fire Code shall be provided in unsprinklered existing structures at the locations described in Sections 903.7.1 through 903.7.3.2.

Where these provisions result in partially sprinklered buildings, durable weatherproof signage shall be provided at the Fire Department Connection(s) clearly indicating that the building is partially protected with fire sprinklers and clearly identifying the portion(s) of the building covered by the fire sprinkler systems.

Where required by the fire code official, the underground fire service and fire sprinkler lead-in to the first portion of an existing unsprinklered building shall be sized to a minimum Ordinary Hazard Group II sprinkler design for future expansion of the fire sprinkler system to cover all other portions of the building.

903.7.1 Additions. Additions to any building shall comply with this Section and Section 3403 of the International Building Code.

903.7.1.1 Sprinklered Addition. In existing unsprinklered buildings where sprinklers are provided for a building addition, whether required or not, the entire building shall be sprinklered.

Exceptions:

1. Other than occupancies of Group E Daycare, Group H, Group I, or Group R, sprinklers are not required to be provided beyond the fire area of the addition where the addition fire area is separated from the reminder of the building by a fire barrier of not less than 2-hours, constructed in accordance with Section 707 of the International Building Code, and without openings.

2. In all occupancies, sprinklers are not required to be provided beyond the fire area of the addition when the addition fire area is separated from the existing building by 4-hour rated fire walls constructed in accordance with Section 706 of the International Building Code, and without openings.

3. When approved by the building official, special hazard areas that are required to be sprinklered for specific uses, such as medical gas rooms, do not require the remainder of the building to be sprinklered

903.7.1.2 Unsprinklered Addition. In existing unsprinklered buildings where sprinklers are not otherwise required or provided in the building addition, the remainder of the building is not required to be provided with sprinklers where any of the following conditions are met:

1. The building has a total area of less than 5,000 sq ft (464 m2) and the addition does not cause the existing building to trigger fire sprinkler protection due to occupancy-specific requirements contained in Section 903.

2. Other than occupancies of Group E Daycare, Group H, Group I, or Group R, the fire area containing the addition is separated from adjacent fire areas by a fire barrier of not less than 2-hours, constructed in accordance with Section 707 of the International Building Code, and without openings.

~~3. In all occupancies, sprinklers are not required to be provided outside the fire area of the addition where the addition fire area is separated from existing building by 4-hour rated fire walls constructed in accordance with Section 706 of the International Building Code, and without openings.~~

~~903.7.2 Alterations. Alterations within existing building shall comply with this Section and Section 3404 of the International Building Code.~~

~~903.7.2.1 Sprinklered Alterations. In existing unsprinklered buildings where sprinklers are provided for an alteration, whether required or not, the entire building shall be sprinklered.~~

~~Exceptions:~~

~~1. Other than occupancies of Group E Daycare, Group H, Group I, or Group R, sprinklers are not required to be provided beyond the fire area containing the alteration where it is separated from the reminder of the building by a fire barrier of not less than 2-hours, constructed in accordance with Section 707 of the International Building Code, and without openings.~~

~~2. In all occupancies, sprinklers are not required to be provided beyond the fire area of the alteration when the alteration fire area is separated from the existing building by 4-hour rated fire walls constructed in accordance with Section 706 of the International Building Code, and without openings.~~

~~3. When approved by the building official, special hazard areas that are required to be sprinklered for specific uses, such as medical gas rooms, do not require the remainder of the building to be sprinklered.~~

~~903.7.2.2 Unsprinklered Alterations. In existing unsprinklered buildings where sprinklers are not otherwise required or provided in the alteration, the remainder of the building is not required to be provided with sprinklers due to the alteration.~~

~~903.7.3 Change of Occupancy. A change of occupancy within an existing building shall comply with this Section and Section 3408 of the International Building Code.~~

~~903.7.3.1 Sprinklered Change of Occupancy. In existing unsprinklered buildings where sprinklers are provided for an area containing a change of occupancy, whether required or not, the entire building shall be sprinklered.~~
~~Exceptions:~~

~~1. Other than occupancies of Group E Daycare, Group H, Group I, or Group R, sprinklers are not required to be provided beyond the fire area containing the change of occupancy where it is separated from the reminder of the building by a fire barrier of not less than 2-hours, constructed in accordance with Section 707 of the International Building Code, and without openings.~~

~~2. In all occupancies, sprinklers are not required to be provided beyond the fire area of the change of occupancy when the change of occupancy fire area is separated from the existing building by 4- hour rated fire walls constructed in accordance with Section 706 of the International Building Code, and without openings.~~

~~3. When approved by the building official, special hazard areas that are required to be sprinklered for specific uses, such as medical gas rooms, do not require the remainder of the building to be sprinklered.~~

~~903.7.3.2 Unsprinklered Change of Occupancy. In existing unsprinklered buildings where sprinklers are not otherwise required or provided in the change of occupancy, the remainder of the building is not required to be provided with sprinklers where any of the following conditions are met:~~

~~1. The building has a total area of less than 5,000 sq ft (464 m2) and the change of occupancy does not cause the existing building to trigger fire sprinkler protection due to occupancy-specific requirements contained in Section 903.~~

~~2. Other than occupancies of Group E Daycare, Group H, Group I, or Group R, the fire area containing the change of occupancy is separated from adjacent fire areas by a fire barrier of not less than 2- hours, constructed in accordance with Section 707, and without openings.~~

~~3. In all occupancies, sprinklers are not required to be provided outside the fire area of the change of occupancy when the change of occupancy fire area is separated from the existing building by 4- hour rated fire walls constructed in accordance with Section 706, and without openings.~~

~~4. When approved by the building official, a change in occupancy to an equal or lesser hazard shall not require the installation of sprinklers for any part of the building. To make such a determination, the building official may consider changes in occupant load, relative fire hazard and other relevant data.~~

907.5

Delete amended Section 907.5 in its entirety and revert back to base code language

~~907.5 Occupant Notification systems. A fire alarm system shall annunciate at the fire alarm control unit and shall initiate occupant notification notification upon activation, IN accordance with Section 907.5.1 through 907.5.2.3.4. Where a fire alarm system is required by another section of this code, it shall be activated by:~~

1. ~~Automatic fire detectors~~
2. ~~Sprinkler water flow devices~~
3. ~~Manual fire alarm, boxes~~
4. ~~Automatic fire-extinguishing systems~~

~~Exception. Where notification systems are allowed elsewhere in Section 907 to annunciate at a constantly attended location.~~

~~Where applicable, the activation of the fire alarm system shall stop any conflicting or confusing sounds and visual distractions; and where house lights are dimmed, cause illumination of the means of egress with light not less that 1 foot candle (11lux) at the walking surface level.~~

907.5 Occupant Notification systems. A fire alarm system shall annunciate at the fire alarm control unit and shall initiate occupant notification upon system activation, In accordance with Section 907.5.1 through 907.5.2.3.4. Where a fire alarm system is required by another section of this code, it shall be activated by:

5. **Automatic fire detectors**
6. **Sprinkler water flow devices**
7. **Manual fire alarm, boxes**
8. **Automatic fire-extinguishing systems**

Exception. Where notification systems are allowed elsewhere in Section 907 to annunciate at a constantly attended location.

907.6.3.1

Delete CLV amended Section 907.6.3.1 in its entirety and refer to the adopted fire code

~~**907.6.3.1.1 Main entrance / foyer.** If a building has a main entrance/foyer, a remote annunciator shall be provided inside the building at the main entrance/foyer.~~

~~**Exceptions:**~~

1. ~~High-rise buildings provided with a fire command center.~~

~~2. Alternate location as approved by the fire code official.~~

~~3. When the fire alarm control unit is located at the main entrance/foyer or within a facility that has a fire command or secondary response point, a remote annunciator is not required at the main entrance/foyer.~~

~~**907.6.3.1.2 Fire riser room.** If a building has a fire riser room with an exterior door, a remote annunciator shall be provided within the fire riser room.~~

~~**Exception:** When the fire alarm control unit is located within the fire riser room or within a facility that has a fire command or secondary response point, a remote annunciator is not required within the fire riser room.~~

~~**907.6.3.1.3 Alphanumeric display.** The location of an operated initiating device shall be displayed by alphanumeric display at the annunciator. The alphanumeric display shall state the device type, the floor level (if applicable), the device address and a descriptive location for the operated device(s).~~

~~**907.6.3.1.4 Canceled Display.** The visible annunciation of the location of operated initiating devices shall not be canceled by the means used to deactivate alarm notification appliances.~~

907.6.3.1 Alarm Annunciator and Fire Alarm Control Unit. Alarm annunciators and fire alarm control units shall comply with all of the following:

1. **If a building has a main entrance/foyer and has more than one story, a read-only remote annunciator shall be provided inside the building at the main entrance/foyer.**

   Exceptions:

   1. **High-rise buildings provided with a fire command center.**
   2. **Alternate location as approved by the fire code official.**
2. **If a building has a fire riser room with an exterior door, the fire alarm control unit shall be provided within the fire riser room.**

   Exceptions:

   1. **High-rise buildings provided with a fire command center.**
   2. **Alternate location as approved by the fire code official.**
3. **The location of an operated initiating device shall be displayed by alphanumeric display at the annunciator.**
4. **The alphanumeric display shall state the device type, the floor level (if applicable), the device address and a descriptive location for the operated device(s).**
5. **The visible annunciation of the location of operated initiating devices shall not be canceled by the means used to deactivate alarm notification appliances.**

907.6.5

Revise Section 907.6.5 as follows

907.6.5

907.6.5 Monitoring. Fire alarm systems required by this chapter or by the IBC shall be monitored by an approved supervising station in accordance with NFPA 72 and with the fire code official guidelines. Home care facilities that are licensed by the State of Nevada are also required to be monitored per this section.

Exception: Monitoring by a supervising station is not permitted unless specifically approved by the fire code official for:

1. **Single- and multiple station smoke alarms required by Section 907.2.11.**
2. **Automatic sprinkler systems in one- and two-family dwellings.**
3. **Monitoring systems utilizing point-by-point monitoring.**

In occupancies provided with a fire alarm system, the following four distinctly different alarm signals shall be transmitted to an approved supervising station with the following priority levels:

1. **Water Flow Alarm, if provided with a fire sprinkler system.**
2. **Fire Alarm.**
3. **Supervisory, when applicable.**
4. **System Trouble when applicable.**

The supervising station shall only retransmit Water Flow Alarm signals to the Fire Department, unless required by the fire code official.

907.8.5.1

Add Section 907.8.5.1 as follows:

When required by the fire code official, when a fire alarm control unit is upgraded; or when a fire alarm control unit is replaced by a different model; or is no longer listed or supported, cannot be tested in accordance with the adopted version of NFPA 72 and reasons defined in said adopted version of NFPA 72, the fire alarm system shall be upgraded in accordance with the adopted Fire Code Section 907, or other approved provisions.

909.21

Add section 909.21 Elevator hoistway pressurization alternatives as follows:

909.21 Elevator hoistway pressurization alternative. Add Entire section 909.21 of the IBC including all subsections.

909.22

Add section 909.22 Smokeproof enclosures as follows:

909.22 Smokeproof enclosures. Add Entire section 909.22 of the IBC including all subsections.

910.3.1-910.3.3

Delete the amended Sections 910.3.1-910.3.3 in their entirety and revert back to base code language

~~**910.3.1 Design.** Smoke and heat vents shall be listed and labeled to indicate compliance with UL 793.~~

~~**910.3.2 Vent operation.** Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Section 910.3.2.1 through 910.3.2.3~~

~~**910.3.2.1 Gravity-operated drop-out vents.** Automatic smoke and heat vents containing heat-sensitive glazing designed to shrink and drop out of the vent opening when exposed to fire shall fully open within 5 minutes after the vent cavity is exposed to a simulated fire, represented by a time-temperature gradient that reaches an air temperature of 500°F (260°C) within 5 minutes.~~

~~**910.3.2.2 Sprinklered buildings.** Where installed in buildings equipped with an approved automatic sprinkler, smoke and heat vents shall be designed to operate automatically by actuation of a heat-responsive device rated at a minimum temperature of 360º F (182º C).~~

~~**910.3.2.3 Nonsprinklered buildings.** Where installed in buildings not provided with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (38°C) and 220°F (104°C) above ambient.~~

~~**Exception:** Gravity-operated drop-out vents complying with Section 910.3.2.1~~

~~**910.3.3 Vent dimensions.** The effective venting area shall not be less than 16 square feet (1.5 m^2) with no dimension less than 4 feet (1219mm), excluding ribs or gutters having a total width not exceeding 6 inches (152 mm)~~

910.3.1 Design. Smoke and heat vents shall be listed and labeled to indicate compliance with UL 793.

910.3.2 Vent operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Section 910.3.2.1 through 910.3.2.3

910.3.2.1 Gravity-operated drop-out vents. Automatic smoke and heat vents containing heat-sensitive glazing designed to shrink and drop out of the vent opening when exposed to fire shall fully open within 5 minutes after the vent cavity is exposed to a simulated fire, represented by a time-temperature gradient that reaches an air temperature of 500°F (260°C) within 5 minutes.

910.3.2.2 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler, smoke and heat vents shall be designed to operate automatically

910.3.2.3 Nonsprinklered buildings. Where installed in buildings not provided with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (38°C) and 220°F (104°C) above ambient.

Exception: Gravity-operated drop-out vents complying with Section 910.3.2.1

910.3.3 Vent dimensions. The effective venting area shall not be less than 16 square feet (1.5 m^2) with no dimension less than 4 feet (1219mm), excluding ribs or gutters having a total width not exceeding 6 inches (152 mm)

913.1.2

Delete the amendment section 913.1.2 in its entirety.

~~913.1.2 Redundant pumps in multiple structures. Where a fire pump is used for booster pressure supply to multiple structures, a redundant fire pump shall be provided for each required fire pump.~~

Chapter 10

Revise the following sections as follows:

Delete sections 1001 through 1029.5.2 and refer to IBC and SNBO requirements. (See attachment of entire chapter)

1103.7

Delete Section 1103.7 in its entirety.

~~1103.7 Fire alarm systems. An approved fire alarm system shall be installed in existing buildings and structures in accordance with Sections 1103.7.1 through 1103.7.7 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by other sections of this code.~~

~~When required by the fire code official, when a fire alarm control unit is upgraded; or when a fire control unit is replaced by a different model; or is no longer listed or supported, and reasons defined ion NFPA 72, the fire alarm system shall be upgraded in accordance with Sections 1103.7.1 through 1103.7.7 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by other sections of this code.~~

2007.1

Delete Section 2007.1 in its entirety revert back to base code language.

~~2007.1 General. All helistops and heliports shall be designed and constructed in accordance with this code, NFPA 418, and FAA AC No:150/5390-2C. Helistops and heliports shall be maintained in accordance with Sections 2007.2 through 2007.8. Helistops and heliports on buildings shall be constructed in accordance with the International Building Code.~~

2007.1 General. All helistops and heliports shall be designed and constructed in accordance with Sections 2007.2 through 2007.8. Helistops and heliports on buildings shall be constructed in accordance with the *International Building Code.*

2306.2.3

Delete amended Section 2306.2.3 in its entirety and revert back to base code language

~~2306.2.3 Above ground tanks located outside, above grade. Above ground tanks shall not be used for the storage of Class I, II of IIIA liquid motor fuels except as provided by this section. When the tank is located within a parcel that is zoned for industrial use (M Zoning District) in accordance with Title 19 of the Las Vegas Municipal Code. Fuel tanks shall be installed in accordance with the following.~~

2306.2.3 Above ground tanks located outside, above grade. Above ground tanks shall not be used for the storage of Class I, II of IIIA liquid motor fuels except as provided by this section. When the tank is located within a parcel

that is zoned for industrial use (M Zoning District) in accordance with Title 19 of the Las Vegas Municipal Code. Fuel tanks shall be installed in accordance with the following.

2311.4

Delete amended Section 2311.4 in its entirety and revert to IBC for requirements

~~2311.4 Below-Grade areas. Pits and below-grade work areas in repair garages shall comply with sections 2311.4.1 through 2311.4.3.~~

~~2311.4.1 Construction. Pits and below-grade work areas shall be constructed in accordance with the International Building Code.~~

~~2311.4.2 Means of Egress. Pits and below-grade work areas shall be provided with means of egress in accordance with Chapter 10.~~

~~2311.4.3 Ventilation. Where Class I liquids or LP-Gas are stored or used within a building having a basement of pit wherein flammable vapors could accumulate, the basement or pit shall be provided with mechanical ventilation in accordance with the International Mechanical Code, at a minimum rate of 1½ cubic feet per minute per square foot (cfm/ft^2)[0.008 m^3/(S • m^2)] to prevent the accumulation of flammable vapors.~~

2311.7

Delete amended Section 2311.7 in its entirety and revert to IBC for requirements

2311.7 Repair Garages for vehicles fueled by lighter-than-air-fuels. Repair garages for the conversion and repair of vehicles which use CNG, liquefied natural gas (LONG), hydrogen or other lighter-than-air motor fuels shall be in accordance with Section s 2311.7 through 2311.7.7.2.3 in addition to the other requirements of Section 2311.

2404.2

Delete amended Section 2404.2 in its entirety and revert back to base code language

~~**2404.2 Location of spray-finishing operations.** Spray finishing operations conducted in buildings areas used for Group A, E, I or R occupancies shall be located in a spray room protected with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 and separated vertically and horizontally from any other areas in accordance with the International Building Code. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth, or spraying space approved for such use.~~

~~**Exceptions:**~~

1. ~~Automobile undercoating spray operations and spray-on automotive lining operations conducted in areas with approved natural or mechanical ventilation shall be exempt from the provisions of Section 2404 when approved and where utilizing Class IIIA or IIIB combustible liquids.~~

2. ~~In buildings other than Group A, E, I or R occupancies, approved limited spraying space in accordance with Section 2404.9.~~

3. ~~Resin application areas used for manufacturing of reinforced plastics complying with Section 2409 shall not be required to be located in a spray room, spray booth or spraying space.~~

2404.2 Location of spray-finishing operations. Spray finishing operations conducted in buildings used for Group A, E, I or R occupancies shall be located in a spray room protected with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 and separated vertically and horizontally from any other areas in accordance with the International Building Code. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth, or spraying space approved for such use.

Exceptions:

1. **Automobile undercoating spray operations and spray-on automotive lining operations conducted in areas with approved natural or mechanical ventilation shall be exempt from the provisions of Section 2404 when approved and where utilizing Class IIIA or IIIB combustible liquids.**

2. **In buildings other than Group A, E, I or R occupancies, approved limited spraying space in accordance with Section 2404.9.**

3. **Resin application areas used for manufacturing of reinforced plastics complying with Section 2409 shall not be required to be located in a spray room, spray booth or spraying space.**

3201.3

Delete Section 3201.3 its entirety revert back to base code language revert back to base code language

~~**3201.3 Construction documents.** At the time of building permit application for new structures designed to accommodate high-piled storage or for requesting a change of occupancy/use, and at the time of application for a storage permit, plans and specifications shall be submitted for review and approval. In addition to the information required by the International Building Code, the storage permit submittal shall include the information specified in this section. Following approval of the plans, a copy of the approved plans shall be maintained on the premises in an approved location. The plans shall include the following:~~

~~1. Floor plan of the building showing locations and dimensions of high-piled storage areas.~~
~~2. Usable storage height for each storage area~~
~~3. Number of tiers within each rack, if applicable.~~
~~4. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.~~
~~5. Aisle dimensions between storage array.~~
~~6. Maximum pile volume for each storage array.~~
~~7. Location and classification of commodities in accordance with Section 3203.~~
~~8. Location of commodities which are banded or encapsulated.~~
~~9. Location of required fire department access doors.~~
~~10. Type of fire suppression and fire detection systems.~~
~~a. For density/area fire sprinklers protecting the high-piled storage area, indicate the sprinkler identification number (SIN), the sprinkler k factor, square footage of the remote area, and the system design density. If the SIN is not available, a copy of the manufacturer specification sheet for the sprinkler head is required.~~
~~b. For specific application sprinklers, such as large-drop and ESFR sprinklers, protecting the high-piled storage area, indicate the sprinkler identification number (SIN), the sprinkler k factor, the number of sprinkler heads in the remote area, and the minimum residual pressure provided at the most hydraulically demanding sprinkler head. If the SIN is not available, a copy of the manufacturer specification sheet for the sprinkler head is required.~~
~~11. Location of valves controlling the water supply of ceiling and in-rack sprinklers.~~
~~12. Type, location, and specifications of smoke removal and curtain board systems.~~

~~13. Dimension and location of transverse and longitudinal flue spaces.~~
~~14. Additional information regarding design features, commodities, storage arrangement and fire protection features within the high-piled storage area shall be provided at the time of permit, when required by the *fire code official*.~~
~~15. Type of shelving material used, whether it is solid, slatted, or wire mesh.~~
~~16. Verification of sufficient fire flow provided for the building, when required by the *fire code official*.~~

3201.3 Construction documents. At the time of building permit application for new structures designed to accommodate high-piled storage or for requesting a change of occupancy/use, and at the time of application for a storage permit, plans and specifications shall be submitted for review and approval. In addition to the information required by the International Building Code, the storage permit submittal shall include the information specified in this section. Following approval of the plans, a copy of the approved plans shall be maintained on the premises in an approved location. The plans shall include the following:

1. **Floor plan of the building showing locations and dimensions of high-piled storage areas.**
2. **Usable storage height for each storage area**
3. **Number of tiers within each rack, if applicable.**
4. **Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.**
5. **Aisle dimensions between storage array.**
6. **Maximum pile volume for each storage array.**
7. **Location and classification of commodities in accordance with Section 3203.**
8. **Location of commodities which are banded or encapsulated.**
9. **Location of required fire department access doors.**
10. **Type of fire suppression and fire detection systems.**
11. **Location of valves controlling the water supply of ceiling and in-rack sprinklers.**
12. **Type, location, and specifications of smoke removal and curtain board systems.**
13. **Dimension and location of transverse and longitudinal flue spaces.**
14. **Additional information regarding design features, commodities, storage arrangement and fire protection features within the high-piled storage area shall be provided at the time of permit, when required by the *fire code official*.**

3208.2.2

Delete Section 3208.2.2 in its entirety revert back to base code language

~~**3208.2.2 Racks with solid shelving.** Racks with solid shelving having an area greater than 20 square feet (1.86 m2), measured between approved flue spaces at all four edges of the shelf, shall be in accordance with this section. Exceptions:~~

~~1. Racks with mesh, grated, slatted, or similar shelves having uniform openings not more than 6 inches (152 mm) apart, comprised of at least 50 percent of the overall shelf area, and with approved flue spaces are allowed to be treated as racks without solid shelves.~~

~~2. Racks used for the storage of combustible paper records, with solid shelving, shall be in accordance with NFPA 13.~~

3208.2.2 Racks with solid shelving. Racks with solid shelving having an area greater than 32 square feet (1.86 m2), measured between approved flue spaces at all four edges of the shelf, shall be in accordance with this section.

Exceptions:

1. Racks with mesh, grated, slatted, or similar shelves having uniform openings not more than 6 inches (152 mm) apart, comprised of at least 50 percent of the overall shelf area, and with approved flue spaces are allowed to be treated as racks without solid shelves.

2. Racks used for the storage of combustible paper records, with solid shelving, shall be in accordance with NFPA 13.

5001.4

Delete amended Section 5001.4 its entirety and revert back to base code language

~~5001.4 Retail and wholesale storage and display. For retail and wholesale storage and display of nonflammable solid and nonflammable or noncombustible liquid hazardous material in Group M occupancies and storage in Group S occupancies, see Sections 5002 and 5003.11.~~

5001.4 Retail and wholesale storage and display. For retail and wholesale storage and display of nonflammable solid and nonflammable or noncombustible liquid hazardous material in Group M occupancies and storage in Group S occupancies, see Section 5003.11.

5001.5.1

Delete amended Section 5001.5.1 in its entirety and revert back to base code language

~~**5001.5.1 Hazardous Materials Management Plan**. Where required by the fire code official or when the Maximum Allowable Quantity per control area is exceeded, an application for a permit shall include a Hazardous Material Management Plan (HMMP). The HMMP shall include a facility site plan designating the following:~~

~~1. Access to each storage and use area.~~
~~2. Location of emergency equipment.~~
~~3. Location of where liaison will meet emergency responders.~~
~~4. Facility evacuation meeting point locations. 5. The general purpose of other areas within the building.~~
~~6. Location of all above-ground and underground tanks and their appurtenances including, but not limited to, sumps, vaults, below-grade treatment systems and piping.~~
~~7. The hazard classes in each area.~~
~~8. Locations of all control areas and Group H occupancies.~~
~~9. Emergency exits.~~

5001.5.1 Hazardous Materials Management Plan. Where required by the fire code official an application for a permit shall include a Hazardous Material Management Plan (HMMP). The HMMP shall include a facility site plan designating the following:

1. Access to each storage and use area.
2. Location of emergency equipment.
3. Location of where liaison will meet emergency responders.
4. Facility evacuation meeting point locations. 5. The general purpose of other areas within the building.

6. Location of all above-ground and underground tanks and their appurtenances including, but not limited to, sumps, vaults, below-grade treatment systems and piping.
7. The hazard classes in each area.
8. Locations of all control areas and Group H occupancies.
9. Emergency exits.

5001.5.2

Delete amended Section 5001.52 in its entirety and revert back to base code language

~~**5001.5.2 Hazardous Materials Inventory Statement (HMIS).** Where required by the fire code official, an application for a permit shall include an HMIS, such as Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, Tier II Report or other approved statement. The HMIS shall include the following information:~~

~~1. Product Name.~~
~~2. Component.~~
~~3. Chemical Abstract Service (CAS) number.~~
~~4. Location where stored or used.~~
~~5. Container size.~~
~~6. Hazard Classification.~~
~~7. Amount in Storage.~~
~~8. Amount in use-closed systems.~~
~~9. Amount in use-open systems.~~
~~10. Aggregate quantities per control area.~~
~~11. Site plan/Floor plan with designated control areas and details of 704 placard for facility and for each control area.~~
~~12. Sprinkler design criteria, if sprinklered.~~
~~13. Cabinets or exhausted enclosures.~~
~~14. NFPA 704 hazard numbers.~~

5001.5.2 Hazardous Materials Inventory Statement (HMIS). Where required by the fire code official, an application for a permit shall include an HMIS, such as Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, Tier II Report or other approved statement. The HMIS shall include the following information:

1. Product Name.
2. Component.
3. Chemical Abstract Service (CAS) number.
4. Location where stored or used.
5. Container size.
6. Hazard Classification.
7. Amount in Storage.
8. Amount in use-closed systems.
9. Amount in use-open systems.

5002

Delete amended Section 5002 in its entirety

~~RETAIL AND WHOLESALE. The sale of new or used goods to: consumers; retailers; industrial, commercial, institutional or professional users; or to other wholesalers.~~

5003.5.1

Delete Section 5003.5.1 in its entirety.

~~**5003.5.1 Signage Rating Method**. Where more than one chemical is present in a building or specific area, signs shall be provided using one of the following methods:~~

~~(1) Composite Method. Where many chemicals are present, a single sign shall summarize the maximum ratings contributed by the material(s) in each category and the special hazard category for the building and/or the area.~~

~~(2) Individual Method. Where only a few chemicals are present or where only a few chemicals are of concern to emergency responders (taking into account factors including physical form, hazard rating, and quantity), individual signs shall be displayed. The chemical name shall be displayed below each sign.~~

~~(3) Composite-Individual Combined Method. A single sign shall be used to summarize the ratings via the Composite method for buildings or other numerous chemicals. Signs based on the Individual Method shall be used for rooms or smaller area within the building containing small numbers of chemicals.~~

5003.5.2

Revise amended Section 5003.5.2 back to base code numbering 5003.5.1

5003.5.1 Markings. Individual containers, cartons, or packages shall be conspicuously marked or labeled in an approved manner. Rooms or cabinets containing compressed gases shall be conspicuously labeled: COMPRESSED GAS.

5003.8.3.5

Delete amended Section 5003.8.3.5 in its entirety and revert back to base code

~~**5003.8.3.5 Hazardous materials in retail and wholesale Group M display and storage areas and in retail and wholesale Group S storage areas.** The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials allowed within a single control area of a retail and wholesale Group M display and storage area or a retail and wholesale Group S storage area is allowed to exceed the maximum allowable quantities per control area specified in Tables 5003.1.1(1) and 5003.1.1(2) without classifying the building or use as a Group H occupancy, provided that the materials are displayed and stored in accordance with Section 5003.11.~~

5003.8.3.5 Hazardous materials in Group M display and storage areas and in retail and wholesale Group S storage areas. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid

hazardous materials allowed within a single control area of a retail and wholesale Group M display and storage area or a retail and wholesale Group S storage area is allowed to exceed the maximum allowable quantities per control area specified in Tables 5003.1.1(1) and 5003.1.1(2) without classifying the building or use as a Group H occupancy, provided that the materials are displayed and stored in accordance with Section 5003.11.

5003.8.8

Delete amended Section 5003.8.8 in its entirety

~~**5003.8.8 Hazardous Materials Information Storage.** When required by the fire code official new or existing buildings or facilities containing hazardous materials in quantities exceeding the maximum allowable quantity per control area, a KNOX Cabinet Series 1300, 7 inch depth with dual locks and rain hood part number 1201 shall be installed in an approved location.~~

5003.11

Delete amended Section 5003.11 in its entirety and revert back to base code language

~~**5003.11 Retail and wholesale Group M storage and display and retail and wholesale Group S storage.** The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials allowed within a single control area of a retail and wholesale Group M display and storage occupancy, or an outdoor control area, or stored in a single control area of a retail and wholesale Group S storage occupancy, is allowed to exceed the maximum allowable quantities per control area indicated in Section 5003.1 when in accordance with Sections 5003.11.1 through 5003.11.3.10.~~

5003.11 Group M storage and display and Group S storage. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored and displayed within a single control area of Group M occupancy, or an outdoor control area, or stored in a single control area of a wholesale Group S occupancy, is allowed to exceed the maximum allowable quantities per control area indicated in Section 5003.1 when in accordance with Section 5003.1 when in accordance with Section s 5003.11.1 through 5003.11.3.10

5301.1

Delete amended Section 5301.1 in its entirety and revert back to base code language

~~**5301.1 Scope.** Storage, use and handling of compressed gases in compressed gas containers, cylinders, tanks and systems shall comply with this chapter, including those gases regulated elsewhere in this code. Partially full compressed gas containers, cylinders or tanks containing residual gases shall be considered as full for the purposes of the controls required.~~

~~Exceptions:~~

~~1. Gases used as refrigerants in refrigeration systems (see Section 606).~~
~~2. Compressed natural gas (CNG) for use as a vehicular fuel shall comply with Chapter 23, NFPA 52 and the International Fuel Gas Code.~~

~~Cutting and welding gases shall also comply with Chapter 35.~~

~~Cryogenic fluids and liquid CO2 shall comply with Chapter 55. Liquefied natural gas for use as a vehicular fuel shall also comply with NFPA 52 and NFPA 59A.~~

~~Compressed gases classified as hazardous materials shall also comply with Chapter 50 for general requirements and chapters addressing specific hazards, including Chapters 58 (Flammable Gases), 60 (Highly Toxic and Toxic Materials), 63 (Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids) and 64 (Pyrophoric Materials).~~

~~LP-gas shall also comply with Chapter 61 and the International Fuel Gas Code.~~

5301.1 Scope. Storage, use and handling of compressed gases in compressed gas containers, cylinders, tanks and systems shall comply with this chapter, including those gases regulated elsewhere in this code. Partially full compressed gas containers, cylinders or tanks containing residual gases shall be considered as full for the purposes of the controls required.

Exceptions:

1. Gases used as refrigerants in refrigeration systems (see Section 606).
2. Compressed natural gas (CNG) for use as a vehicular fuel shall comply with Chapter 23, NFPA 52 and the International Fuel Gas Code.

Cutting and welding gases shall also comply with Chapter 35.

Cryogenic fluids shall comply with Chapter 55. Liquefied natural gas for use as a vehicular fuel shall also comply with NFPA 52 and NFPA 59A.

Compressed gases classified as hazardous materials shall also comply with Chapter 50 for general requirements and chapters addressing specific hazards, including Chapters 58 (Flammable Gases), 60 (Highly Toxic and Toxic Materials), 63 (Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids) and 64 (Pyrophoric Materials).

LP-gas shall also comply with Chapter 61 and the International Fuel Gas Code.

5306.5

Delete amended Sections 5306.5 in its entirety

~~5306.5 Medical gas system plan submittal.~~ ~~Plans and specifications shall be submitted for review and approval. Following approval of the plans, a copy of the approved plans and permit shall be maintained on the premises in an approved location. As required by the *fire code official*, the plans shall include the following:~~

1. ~~Project name, street address and owners name.~~
2. ~~Contractor name, address, phone number, license numbers (City, State Contractor and State Fire Marshal).~~
3. ~~Signature of the licensee (contractors Master or Qualified Employee) or seal and signature of a Professional Engineer licensed in the state of Nevada.~~
4. ~~Code edition of standards used in the design.~~
5. ~~System classification (Level).~~
6. ~~When used - gas type, container size and quantity.~~

7. Symbol legend with equipment description (manufacture's name and model number) and mounting description (surface, semi-flush, flush, and exterior).
8. Site plan.
9. Floor plan drawn to an indicated scale (1/8" minimum) on sheets of a uniform size showing:
    a. Point of compass (north arrow).
    b. Walls, doors, windows, openings, stairs, elevators, passageways, high-piled storage racks, etc. as applicable to depict the facility.
    c. Room use identification labels.
    d. Gas, air and vacuum piping distribution systems, manifolds, sizes and material types. Piping hangers and slopes.
        a. Valves and valve boxes, outlets, gages and other components.
        b. Electrical warning systems (local and master alarm panels), conductor/conduit routing and size, power panel and circuit connection.
        c. Key plan.
        d. Compressor inlet location and vacuum exhaust outlet location.
        e. For interior gas supply rooms provide construction fire ratings, ventilation and fire sprinkler information.
10. Product data submittal including a cover index sheet listing products used by make and model number, manufacturer data sheets (highlighted or marked) and listing information for all equipment, devices, and materials.
11. Design number and detail of penetration fire stop system when required.
12. Verification & inspection requirements.
13. Name of independent medical gas testing agency to certify the system.
14. Any additional information determined necessary.

5306.6

Delete amended Sections 5306.6 in its entirety

5306.6 Medical gas systems, testing. Hyperbaric systems and medical gas systems required by NFPA 99 to be verified by person other than the installing contractor shall be certified by an independent medical gas testing agency prior to use of the system. The independent medical gas inspector shall hold a current NITC certification and Nevada State Fire Marshal certification as a medical gas inspector. The *fire code official* may witness any or all testing. Copies of the system certification shall be provided to the *fire code official*.

5307.3

Delete Section 5307.3 2012 IFC in its entirety and revise to the 2015 fire code language as follows:

5307.3 Liquefied carbon dioxide.

1. Construction and operational permits shall be obtained for liquefied carbon dioxide containers or systems.

2. Rooms containing liquefied carbon dioxide tanks, cylinders or containers must be equipped with approved sensors capable of detecting carbon dioxide concentrations of 3% v/v (30,000 parts per million(OSHA STEL).

3. Approved sensors shall be connected to local visible and audible alarms which will alert building occupants at the space containing the liquefied carbon dioxide tank, cylinder, or container when the carbon dioxide level within the room reaches 3% v/v.

~~4. Rooms required to be equipped with carbon dioxide sensors/alarms, must display signage at the entrance to the room that warns occupants not to enter when alarms are activated.~~

CARBON DIOXIDE (CO2) SYSTEMS USED IN BEVERAGE DISPENSING APPLICATIONS

5307.1 General. Carbon dioxide systems with more than 100 pounds (45.4 kg) of carbon dioxide used in beverage dispensing applications shall comply with Sections 5307.2 through 5307.5.2.

5307.2 Permits. Permits shall be required as set forth in Section 105.6.

5307.3 Equipment. The storage, use, and handling of liquid carbon dioxide shall be in accordance with Chapter 53 and the applicable requirements of NFPA 55, Chapter 13. Insulated liquid carbon dioxide systems shall have pressure relief devices vented in accordance with NFPA 55.

5307.4 Protection from damage. Carbon dioxide systems shall be installed so the storage tanks, cylinders, piping and fittings are protected from damage by occupants or equipment during normal facility operations.

5307.5 Required protection. Where carbon dioxide storage tanks, cylinders, piping and equipment are located indoors, rooms or areas containing carbon dioxide storage tanks, cylinders, piping and fittings and other areas where a leak of carbon dioxide can collect shall be provided with either ventilation in accordance with Section 5307.5.1 or an emergency alarm system in accordance with Section 5307.5.2.

5307.5.1 Ventilation. Mechanical ventilation shall be in accordance with the *International Mechanical Code* and shall comply with all of the following:

1. Mechanical ventilation in the room or area shall be at a rate of not less than 1 cubic foot per minute per square foot [0.00508 m3/(s • m2)].

2. Exhaust shall be taken from a point within 12 inches (305 mm) of the floor.

3. The ventilation system shall be designed to operate at a negative pressure in relation to the surrounding area.

5307.5.2 Emergency alarm system. An emergency alarm system shall comply with all of the following:

1. Continuous gas detection shall be provided to monitor areas where carbon dioxide can accumulate.

2. The threshold for activation of an alarm shall not exceed 5,000 parts per million (9,000 mg/m3).

3. Activation of the emergency alarm system shall initiate a local alarm within the room or area in which the system is installed.

5601.1.3

Delete amendment 5601.1.3 in its entirety and revert back to base code.

~~**5601.1.3 Fireworks** The possession, manufacture, storage, sale, handling, and use of fireworks are prohibited.~~

~~**Exceptions:**~~

1. ~~Storage and handling of fire works as allowed in Section 5604.~~
2. ~~Manufacturer, assembly and testing of fireworks as allowed in Section 5605.~~
3. ~~The use of fireworks for fireworks displays as allowed in Section 5608.~~
4. ~~The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided such fireworks comply with CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR, Parts 100-185, for consumer fireworks.~~
5. ~~The possession, storage, use, handling, and sale of consumer safe and sane fireworks in accordance with the current "Fire Prevention Association of Nevada Guidelines for Fireworks".~~

5601.1.3 Fireworks The possession, manufacture, storage, sale, handling, and use of fireworks are prohibited.

Exceptions:

1. **Storage and handling of fire works as allowed in Section 5604.**
2. **Manufacturer, assembly and testing of fireworks as allowed in Section 5605.**
3. **The use of fireworks for fireworks displays as allowed in Section 5608.**
4. **The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided such fireworks comply with CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR, Parts 100-185, for consumer fireworks.**

5601.2.2

Delete amended Section 5601.2.2 in its entirety and revert back to base code language.

~~**5601.2.2 Sale and retail display.** No person shall construct a retail display nor offer for sale explosives, explosive materials, of fireworks upon highways, sidewalks, public property, or in Group A or E occupancies. All sales and retail displays of fireworks and explosives are prohibited.~~

> ~~**Exception:** Consumer fireworks 1.4G (safe and sane) offered for sale at portable retail fireworks stands that are in accordance with the current "Fire Prevention Association of Nevada Guidelines for Fireworks".~~

5601.2.2 Sale and retail display. No person shall construct a retail display nor offer for sale explosives, explosive materials, of fireworks upon highways, sidewalks, public property, or in Group A or E occupancies.

5601.2.4

Delete amended Section 5601.2.4 in its entirety and revert back to base code language.

~~**5601.2.4 Financial Responsibility**. Before a permit is issued, as required by Section 5601.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of $100,000 or a public liability insurance policy for the same amount valid certificate of insurance complying with Section 105.1.4.1 in the amount of $5,000,000.00, for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The *fire code official* is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this bond requirement.~~

5601.2.4 Financial Responsibility. Before a permit is issued, as required by Section 5601.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of $100,000 or a public liability insurance policy for the same amount for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The *fire code official* is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this bond requirement.

5601.2.4.1

Delete amended Section 5601.2.4.1 in its entirety and revert back to base code language.

~~**5601.2.4.1 Blasting**. Before approval to do blasting is issued, the applicant for approval shall file a bond or submit a certificate of insurance as specified in Chapter 1 in such form, amount and coverage as determined by the legal department of the jurisdiction to be adequate in each case to indemnify the jurisdiction against any and all damages arising from permitted blasting~~

5601.2.4.1 Blasting. Before approval to do blasting is issued, the applicant for approval shall file a bond or submit a certificate of insurance in such form, amount and coverage as determined by the legal department of the jurisdiction to be adequate in each case to indemnify the jurisdiction against any and all damages arising from permitted blasting.

5601.2.4.2

Delete amended Section 5601.2.4.2 in its entirety and revert back to base code language.

~~**5601.2.4.2 Fireworks Display**. The permit holder shall furnish a bond or certificate of insurance as specified in Chapter 1 in an amount deemed adequate by the *fire code official* for the payment of all potential damages to a person or persons or to property by reason of the permitted display, and arising from any acts of the permit holder, the agent, employees or subcontractors.~~

5601.2.4.2 Fireworks Display. The permit holder shall furnish a ~~bond or~~ certificate of insurance in an amount deemed adequate by the *fire code ~~official~~* for the payment of all potential damages to a person or persons or to property by reason of the permitted display, and arising from any acts of the permit holder, the agent, employees or subcontractors.

5601.5

Delete amended Section 5601.5 in its entirety and revert back to base code language.

~~**5601.5 Supervision**. The *fire code official* is authorized to require operations permitted under the provisions of Section 5601.2 to be supervised at any time by the *fire code official* in order to determine compliance with all safety and fire regulations. *Fire code official*(s) or approved designee(s) shall be required for all productions where pyrotechnic special effects are used.~~

> ~~**Exception**: Where the pyrotechnic special effects are used in an approved set show that is repeated continuously without change, the *fire code official* may waive the requirement for attendance to all productions, provided the fire code official has successfully witnessed product demonstration and at least one performance.~~

5601.5 Supervision. The *fire code official* is authorized to require operations permitted under the provisions of Section 5601.2 to be supervised at any time by the *fire code official* in order to determine compliance with all safety and fire regulations.

5603.8

Delete amended Section 5603.8 in its entirety

~~**5603.8 Shot reports.** Shot reports shall be maintained for every blast. These reports shall be available to the *fire code official* upon request within 48 hours. The report shall at a minimum contain the following information:~~

1. ~~Date and time of the blast.~~
2. ~~Company name and contact information.~~
3. ~~Location of the blast.~~
4. ~~Weather conditions including temperature and wind speed.~~
5. ~~Quantity and description of all materials used.~~
6. ~~A list of any un-spent or misfired products.~~
7. ~~A list of all personnel present.~~
8. ~~The license type and card number of the blaster.~~
9. ~~The signature of the blaster or shooter in charge.~~
10. ~~For blasting operations the report shall include the seismic data.~~

5604.1

Delete amended Section 5604.1 in its entirety and revert back to base code language.

~~**5604.1 General.** Storage of explosives and explosives materials, small arms ammunition, small arms primers, propellant-actuated cartridges, and smokeless propellants in magazines shall comply with the provisions of this section. Explosive materials shall be stored only in areas with appropriate zoning and use permits as required by the planning or zoning authority, and shall be subject to the approval of the *fire code official*.~~

5604.1 General. Storage of explosives and explosives materials, small arms ammunition, small arms primers, propellant-actuated cartridges, and smokeless propellants in magazines shall comply with the provisions of this section.

5604.6.5

Delete amended Section 5604.6.5 in its entirety and revert back to base code language.

~~**5604.6.5 Signs and placards.** Property upon which Type 1 magazines and outdoor magazines of Types 2, 4 and 5 are located shall be posted with signs stating: NO SMOKING and EXPLOSIVES—KEEP OFF. These signs shall be of contrasting colors with a minimum letter height of 3 inches (76 mm) with a minimum brush stroke of ½ inch (12.7 mm). The signs shall be located to minimize the possibility of a bullet shot at the sign hitting the magazine~~

5604.6.5 Signs and placards. Property upon which Type 1 magazines and outdoor magazines of Types 2, 4 and 5 are located shall be posted with signs stating: EXPLOSIVES—KEEP OFF. These signs shall be of contrasting colors with a minimum letter height of 3 inches (76 mm) with a minimum brush stroke of ½ inch (12.7 mm). The signs shall be located to minimize the possibility of a bullet shot at the sign hitting the magazine

5604.6.5.2

Delete amended Section 5604.6.5.2 in its entirety and revert back to base code language.

5604.6.5.2 Placards. Type 5 magazines containing Division 1.5 blasting agents shall be prominently placarded during storage as required during transportation by DOTn 49CFR, Part 172 and DOTy 27 CFR, Part 55. All other magazines shall be labeled with the hazard classification only.

5604.6.5.2 Placards. Type 5 magazines containing Division 1.5 blasting agents shall be prominently placarded as required during transportation by DOTn 49CFR, Part 172 and DOTy 27 CFR, Part 55.

5604.7.1

Delete amended Section 5604.7.1 in its entirety and revert back to base code language.

~~**5604.7.1 Security.** Magazines shall be kept locked in the manner prescribed in NFPA 495 at all times except during placement or removal of explosives, inventory, or inspection. In addition to the locking requirements the following security measures shall be required at all explosives storage locations.~~

1. ~~The entire magazine site shall be fenced. The fence shall be a minimum of 8 feet in height and constructed of non-combustible materials.~~

   ~~**Exception:** Indoor storage locations shall be secured in a manner consistent with NFPA 495~~

2. ~~All outdoor explosives magazines and storage sites shall be equipped with an approved centrally monitored security system.~~

   ~~**Exception:** For temporary installations with a duration of less than 30 days, 24 hour manned security guards may be used in lieu of the centrally monitored security system when approved by the *fire code official*.~~

5604.7.1 Security. Magazines shall be kept locked in the manner prescribed in NFPA 495 at all times except during placement or removal of explosives or inspection.

5605.1

Delete amended Section 5605.1 in its entirety and revert back to base code language.

~~**5605.1 General.** The manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks is prohibited shall comply with the requirements of this section and NFPA 495 or NFPA 1124.~~

~~**Exceptions:**~~

1. ~~The hand loading of small arms ammunition prepared for personal use and not offered for resale.~~
2. ~~The mixing and loading of blasting agents at blasting sites in accordance with NFPA 495.~~

3. The use of binary explosives or plosophoric materials in blasting or pyrotechnic special effects applications in accordance with NFPA 495 or NFPA 1126.

Subject to approval of the fire code official and obtaining proper approvals from the planning and zoning authority

5605.1 General. The manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks shall comply with the requirements of this section and NFPA 495 or NFPA 1124.

Exceptions:

1. **The hand loading of small arms ammunition prepared for personal use and not offered for resale.**
2. **The mixing and loading of blasting agents at blasting sites in accordance with NFPA 495.**
3. **The use of binary explosives or plosophoric materials in blasting or pyrotechnic special effects applications in accordance with NFPA 1126.**

5607.3

Delete amended Section 5607.3 in its entirety.

5607.3

5607.3 Blasting in congested areas. When blasting is done in a congested area or in close proximity to a structure, railway or highway, development, quarry, or any other installation, precautions shall be taken to minimize earth vibrations and air blast effects. Blasting mats or other protective means shall be used to prevent fragments from be thrown.

5607.3.1 Blasting activities. The blasting contractor shall comply with the following requirements in connection with all blasting activities:

1. All blasts shall be monitored at the nearest structure by a third party engineering firm. Such monitoring shall be done by a seismologist using a certified, annually calibrated, seismic monitor that shall be capable of measuring blast-induced vibration and blast-induced sound levels.
2. A minimum of two seismographs shall be used to obtain data from each blast as required by the *fire code official*.
3. The maximum ground-borne vibrations shall not exceed a single component peak particle velocity (vector sum) of 0.5 inches per second at the nearest structure.
4. The maximum airblast shall not exceed 120 db at the nearest structure.
5. Monitoring results shall be reported to the *fire code official* within 48 hours in a manner prescribed by the *fire code official*.
6. The blasting contractor shall provide a minimum of 72 hours prior written notice to all residences, property owners, businesses, and public uses within 2500 feet of the blasting area. The manner, form, and content of any such notice shall be subject to the approval of the *fire code official*.
7. For utility notification see 5607.5.
8. The blasting contractor shall notify the fire department and fire dispatch a minimum of two (2) hours prior to each blast, and immediately following each blast in a manner prescribed by the *fire code official*.
9. The blasting contractor shall provide for pre-blast, project duration, and post blast inspections of neighboring properties within 300 feet from the nearest blast hole, upon which are located structures in

close proximity to the blasting area, or when otherwise required by condition of the *fire code official*. These inspections must be completed by a third party engineering firm.

10. A traffic and access control plan shall be provided when blasting activities are conducted within 100 feet of any public roadway, or when required by the *fire code official*. The plan shall include warning signage, flagging, temporary road closures, and detour routes. This plan may be subject to the approval of the local law enforcement, of traffic enforcement agency.
11. The blasting contractor shall be responsible for removing and cleaning up any blast-related debris from the blast site and adjacent properties.

Exception: These requirements may be modified by the *fire code official*.

5607.3.2 Permit Requirements. A permit is required for the storage and or use of explosives, and for any proposed excavation or development activity that will involve blasting. The permit must be obtained by the blasting contractor prior to the beginning of any drilling or blasting activities. The application shall be made to the fire department in such a form and detail as described by the *fire code official*. Applications for permits shall be accompanied by plans detailing the proposed blasting activities as required by the *fire code official*.

5607.4

Delete amended Section 5607.4 in its entirety and revert back to base code language.

5607.4 Restricted hours. Surface-bBlasting operations shall be limited to the hours of 8 a.m. to 4 p.m., Monday through Friday, excluding state-recognized holidays,. only be conducted during daylight hours between sunrise and sunset. Other blasting shall be performed during daylight hours unless otherwise approved by the *fire code official*.

5607.4 Restricted hours. Surface-blasting operations shall only be conducted during daylight hours between sunrise and sunset. Other blasting shall be performed during daylight hours unless otherwise approved by the *fire code official*.

5607.5

Delete amended Section 5607.5 in its entirety and revert back to base code language.

5607.5 Utility Notification. Whenever blasting is being conducted in the vicinity of utility lines or rights-of-way, the blaster shall notify the appropriate representatives of the utilities at least 24 hours in advance of blasting, specifying the location and intended time of such blasting. Verbal notices shall be confirmed with written notice. The blasting contractor shall contact "Call Before You Dig" to obtain a utility notification dig-ticket number a minimum of 48 hours prior to commencing any drilling or blasting activities. A copy of the dig ticket shall be provided to the *fire code official* upon request.

5607.5 Utility Notification. Whenever blasting is being conducted in the vicinity of utility lines or rights-of-way, the blaster shall notify the appropriate representatives of the utilities at least 24 hours in advance of blasting, specifying the location and intended time of such blasting. Verbal notices shall be confirmed with written notice.

Exception: In an emergency situation, the time limit shall not apply when *approved*

5607.6

Delete amended Section 5607.6 in its entirety and revert back to base code language.

~~**5607.6 Electric or electronic detonator precautions.** Precautions shall be taken to prevent accidental discharge of electric or electronic detonators from currents induced by radar and radio transmitters, lightning, adjacent power lines, dust and snow storms, or other sources of extraneous energy.~~

5607.6 detonator precautions. Precautions shall be taken to prevent accidental discharge of electric detonators from currents induced by radar and radio transmitters, lightning, adjacent power lines, dust and snow storms, or other sources of extraneous energy.

5607.13

Delete amended Section 5607.13 in its entirety and revert back to base code language.

~~**5607.13 Firing Control Pre-blast procedures.** No blast shall be fired until the blaster had made certain that all surplus *explosive materials* are in a safe place in accordance with Section 5607.10, all persons and equipment are at a safe distance or under sufficient cover and that an adequate warning signal has been given.~~

~~1. The blaster has made certain that all surplus explosives materials are in a safe place in accordance with Section 5607.10 and;~~
~~2. All construction workers and equipment are at a safe distance and;~~
~~3. Seismic monitor(s) are set up and;~~
~~4. All access to the blast site has been shut down and secured and;~~
~~5. Communication has been set up between the blaster in charge and those persons securing the blast site and;~~
~~6. That adequate warning signals have been given.~~

5607.13 Firing Control No blast shall be fired until the blaster has made certain that all surplus *explosive materials* are in a safe place in accordance with Section 5607.10, all persons and equipment are at a safe distance or under sufficient cover and that an adequate warning signal has been given.

5607.14

Delete amended Section 5607.14 in its entirety and revert back to base code language.

~~**5607.14 Post-blast procedures.** After the blast, the following procedures shall be observed.~~

~~1. No *person* shall return to the blast area until allowed to do so by the blaster in charge.~~

~~2. The blaster shall allow sufficient time for smoke and fumes to dissipate and for dust to settle before returning to or approaching the blast area.~~

~~4. The blaster shall inspect the entire blast site for misfires before allowing other personnel to return to the blast area.~~

~~5. The blaster shall sound an all clear warning signal in accordance with 5607.13.1~~

5607.14 Post-blast procedures. After the blast, the following procedures shall be observed.

1. No *person* shall return to the blast area until allowed to do so by the blaster in charge.
2. The blaster shall allow sufficient time for smoke and fumes to dissipate and for dust to settle before returning to or approaching the blast area.
3. The blaster shall inspect the entire blast site for misfires before allowing other personnel to return to the blast area.

5608.1

Delete Section 5608.1 in its entirety and revert back to base code language.

~~**5608.1 General**. Outdoor fireworks displays, use of pyrotechnics before a proximate audience displays and pyrotechnic special effects in motion picture, television, theatrical, and group entertainment productions, shall comply with the *fire code official's* guidelines, Sections 5608.2 through 5608.10, and NFPA 1123, or NFPA 1126, or NFPA 160~~

5608.1 General. Outdoor fireworks displays, use of pyrotechnics before a proximate audience displays and pyrotechnic special effects in motion picture, television, theatrical, and group entertainment productions, shall comply with, Sections 5608.2 through 5608.10, and NFPA 1123, NFPA 1126.

5704.2.9.6.1

Delete CLV amendment Section 5704.2.9.6.1 in its entirety and revert back to base code language.

~~**CM 5704.2.9.6.1 Locations where above-ground tanks are prohibited.** Storage of Class I, and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the International Fire Code of page xxi). when the tank is located within a parcel that is not zoned for industrial use (M Zoning District) in accordance with Title 19 of the Las Vegas Municipal Code.~~

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I, and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the International Fire Code of page xxi).

5704.5

Delete added Section 5704.5 in its entirety.

~~**5704.5 Generator and Fire Pump Diesel Fuel Tanks.**~~

~~**5704.5.1 Exterior Installations.** Exterior installations shall be in accordance with this section.~~

~~**5704.5.1.1 Secondary containment.** Tanks shall be listed and labeled as a secondary containment tank in accordance with UL 142 or shall be a UL 2085 tank.~~

~~**5704.5.1.2 Separation distances.** Aboveground tanks shall be separated from property lines, important buildings, public ways, and other tanks in accordance with NFPA 30.~~

~~**5704.5.2 Interior Installations.** Interior installations of aboveground fuel tanks shall comply with Chapters 6, 50 and 57.~~

5706.2.4.4

Delete amended Section 5706.2.4.4 in its entirety and revert back to base code language.

~~**5706.2.4.4 Locations where above-ground tanks are prohibited**. The storage of class I, and II, and III liquids in above-ground tanks outside of buildings is prohibited. within the limits established by law as the limits of districts in which such storage is prohibited. (see Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page v).~~

> ~~**Exception**: When approved by the planning or zoning authority (in jurisdictions requiring this specific approval) and when *approved* by the *fire code official.*~~

5706.2.4.4 Locations where above-ground tanks are prohibited. The storage of class I, II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited. (See Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page v).

5706.5.1.6

Delete amended Section 5706.5.1.6 in its entirety and revert back to base code language.

~~**5706.5.1.6 Fire Protection.** Fire Protection shall be in accordance with Section 5703.2. Where operations involve vehicle loading of Class I and/or Class II liquids, the loading areas shall be protected with approved automatic fire protection systems.~~

5706.5.1.6 Fire Protection. Fire Protection shall be in accordance with Section 5703.2.

5806.2

Delete Section 5806.2 in its entirety and revert back to base code language.

~~**5806.2 Limitations**. Storage of flammable *cryogenic fluids* in stationary containers outside of buildings is prohibited. within the limits established by law as the limits of districts in which such storage is prohibited. (see Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page v).~~

> ~~**Exception**: When *approved* by the planning or zoning authority (in jurisdictions requiring this specific approval) and when *approved* by the *fire code official.*~~

5806.2 Limitations. Storage of flammable *cryogenic fluids* in stationary containers outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited. (See Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page v).

6101.2.1

Delete CLV amendment Section 6101.2.1 in its entirety.

~~**6101.2.1 Special use permit.** A special use permit must be obtained in accordance with Title 19 of the Las Vegas~~

~~Municipal Code for liquefied petroleum gas storage containers with an aggregate water capacity exceeding 288 gallons (1090 L).~~

6104.2

Delete CLV amendment Section 6104.2 in its entirety and revert back to base code language

~~**CM 6104.2 Maximum capacity within established limits.** The aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L).~~

> ~~**Exception:** Installations located within a parcel that is zoned for industrial use (M Zoning District) in accordance with the Title 19 of the Las Vegas Municipal Code. Additionally, when required by the fire code official, additional fire protection shall be provided for such installations in accordance with NFPA 58, Section 6.25.~~

6104.2 Maximum capacity within established limits. Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570L) (See Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxii)

Exception: In particular installations, this capacity limit shall be determined by the fire code official, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of proposed LP-Gas containers, degree of fire protection to be provided and capabilities of the local fire department.

Chapter 80

Add Referenced Standard as follows:

418-16 Standard for Heliports

400-10 Hazardous Materials Code

Appendix B 104.2

Delete CLV amendment Section B104.2 in its entirety and revert back to base code language

~~**CM B104.2 Area separation.** Portions of buildings which are separated by 4 hour fire walls without openings, constructed in accordance with the International Building Code, are allowed to be considered as separate fire-flow calculation areas.~~

B104.2 Area separation. Portions of buildings which are separated by fire walls without openings, constructed in accordance with the International Building Code, are allowed to be considered as separate fire-flow calculation areas.

NFPA 13

3.3.25

Add Section 3.3.25 to read as follows:

3.3.25 Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

3.3.26

Add Section 3.3.26 to read as follows:

3.3.26 Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

3.3.27

Add Section 3.3.27 to read as follows:

3.3.27 Accessible Spaces. Spaces or concealed areas of construction that can be entered via openable panels, doors hatches, or other readily movable elements (e.g., ceiling tiles).

8.15.7.2

Modify CLV amendment Section 8.15.7.2 as follows:

~~**CA 8.15.7.2** Sprinklers shall be permitted to be omitted where the exterior projections are constructed entirely with materials that are noncombustible, limited-combustible, or fire-retardant treated wood as defined in NFPA 703, and where the exterior projections do not support occupancy above.~~

8.15.7.2 *Sprinklers shall be permitted to be omitted where the exterior projections are constructed with materials that are noncombustible, limited-combustible, or fire-retardant treated wood as defined in NFPA 703 and where the exterior projections do not support occupancy above.~~

8.15.7.4

Delete CLV amendment Section 8.15.7.4 in its entirety and refer to the currently adopted fire code

~~**CM 8.15.7.4** When permitted by Section 1018.1 of the International Building Code, Sprinklers sprinklers shall be permitted to be omitted from exterior exit corridors when the exterior walls of the corridor are at least 50 percent open and when the corridor is entirely of noncombustible construction~~

8.15.7.4 Sprinklers shall be permitted to be omitted from exterior exit corridors when the exterior walls of the corridor are at least 50 percent open and when the corridor is entirely of noncombustible construction.

8.17.4.2.4

Delete CLV amendment Section 8.17.4.2.4 in its entirety and refer to the currently adopted code.

~~**CM 8.17.4.2.4** The alarm test connection shall be permitted to be installed in any location on the fire sprinkler system down-stream of the waterflow alarm. The alarm test connection valve shall be piped from the most hydraulically demanding area and shall be readily accessible.~~

8.17.4.2.4. The alarm test connection shall be permitted to be installed in any location on the fire sprinkler system down-stream of the water flow alarm.

8.17.4.2.5

Delete CLV amendment Section 8.17.4.2.5 in its entirety with no new language.

~~**CA 8.17.4.2.5** Buildings three or more stories in height do not require the inspector test valve to be piped from the most hydraulically demanding area.~~

22.38.1

Delete CLV amendment Section 22.38.1 in its entirety and refer to the currently adopted fire code

~~***CM 22.38 Matrix for IBC Group R Division 3 Occupancies and buildings built under the IRC.***~~

~~**22.38.1 General.** When a sprinkler system is being installed to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access, for a Group R Division 3 Occupancy, the design requirements in Table 21.37.1 shall be applied. upgraded to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access, the sprinkler system shall be designed in accordance with Section~~

~~**Table 22.38.1**~~

~~**Protection Mitigation Matrix for Group R Division 3 Occupancies and buildings built under the IRC [4]**~~

~~Building Area Size Range[6]~~	~~Protection Mitigation Residential System Type [1,3]~~	~~Separate Sprinkler Lead-in Required [5]~~	~~Minimum Underground Pipe Size [5]~~	~~Minimum Water Meter Size [7]~~	~~Sprinklers Required in Areas Subject to Freezing~~
~~< 3,600 sq.ft.~~	~~Standard NFPA 13D [2]~~	~~See NFPA 13D for design requirements~~			
~~≥ 3,600 sq.ft. and < 10,000 sq.ft.~~	~~Enhanced NFPA 13D [1,2]~~	~~See NFPA 13D for design requirements~~			
~~≥ 10,000 sq.ft. and~~	~~Enhanced~~	~~See NFPA 13R for design requirements~~			

~~<15,000 sq.ft.~~	~~NFPA 13R [1]~~				
~~≥ 15,000 sq.ft.~~	~~Modified NFPA 13 [1]~~	~~Yes~~	~~N/A~~	~~N/A~~	~~Yes~~

~~N/A = Not Applicable~~

~~[1] This mitigation constitutes a building Acompletely protected with an approved fire sprinkler system@ per the IFC.~~

~~[2] Domestic demand of 5 gpm is required to be added to the sprinkler demand in the hydraulic calculations.~~

~~[3] Free-standing detached guest houses or garages shall be protected by an Enhanced NFPA 13D system.~~

~~[4] Excluding Group R Division 3 occupancies used as Group Care Homes.~~

~~[5] U.G. lead-in shall be the minimum size required hydraulically as proven by the sprinkler contractor and shall be hydrostatically tested and flushed, witnessed by the fire dept.~~

~~[6] Building area is defined as all areas under roof except for porches, patios, balconies, carports and porte-cocheres.~~

~~[7] Water meters used for residential sprinkler systems shall be residential fire service meters or other meters approved by the water purveyor.~~

22.38 Protection matrix for IBC Group R Division 3 Occupancies and buildings built under the IRC.

22.38.1 General. When a sprinkler system is being installed to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access, for a Group R Division 3 Occupancy, and buildings built under the IRC, the design requirements on Table 22.38.1 shall be applied.

Table 22.38.1 Protection Matrix for Group R Division 3 Occupancies and buildings built under the IRC [4]

Building Area Size Range[6]	~~Protection~~ Mitigation Residential System Type [1,3]	Separate Sprinkler Lead-in Required [5]	Minimum Underground Pipe Size [5]	Minimum Water Meter Size [7]	Sprinklers Required in Areas Subject to Freezing
< 3,600 sq.ft.	Standard NFPA 13D [2]	See NFPA 13D for design requirements			
≥ 3,600 sq.ft. & < 10,000 sq.ft.	Enhanced NFPA 13D [1,2]	See NFPA 13D for design requirements			
≥ 10,000 sq.ft. & <15,000 sq.ft.	Enhanced NFPA 13R [1]	See NFPA 13R for design requirements			
≥ 15,000 sq.ft.	Modified NFPA 13 [1]	Yes	N/A	N/A	Yes

N/A = Not Applicable

1. **This mitigation constitutes a building Acompletely protected with an approved fire sprinkler system per the IFC.**
2. **Domestic demand of 5 gpm is required to be added to the sprinkler demand in the hydraulic calculations.**
3. **Free-standing detached guest houses or garages shall be protected by an Enhanced NFPA 13D system.**
4. **Excluding Group R Division 3 occupancies used as Group Care Homes.**
5. **U.G. lead-in shall be the minimum size required hydraulically as proven by the sprinkler contractor and shall be hydrostatically tested and flushed, witnessed by the fire dept.**
6. **Building area is defined as all areas under roof except for porches, patios, balconies, carports and porte-cocheres.**
7. **Water meters used for residential sprinkler systems shall be residential fire service meters or other meters approved by the water purveyor.**

22.38.2

Delete CLV amendment Section 22.38.2 in its entirety and refer to the currently adopted fire code

~~**22.38.2 Modified 13 Design Criteria.** When Table 21.38.1 requires a Modified 13 Design, the sprinkler system shall be installed to meet the requirements of this code, with the exception of the following items:~~

~~1. Fire Department Connections (FDC): A 2-2-inch fire department connection is required. A single snoot connection will be accepted. The FDC shall be located on the garage wall facing the street except for special circumstances where the FDC may be freestanding and located adjacent to the street or private drive. A freestanding FDC in these circumstances may be designed into the mailbox column.~~

~~2. Riser Room: Risers shall be located in either the garage or within a dedicated room with an exterior door. Provided the garage/room is fully insulated the requirement for maintaining 40F will not require a source of heat.~~

~~3. Inspectors Test Connection: The inspectors test location may be piped off the system riser.~~

~~4. Piping in locations less than 40F: Dry pipe systems are not permitted for the protection of living spaces, anti-freeze systems shall be used. The protection of non-living spaces such as attics may be protected by dry-pipe systems.~~

~~5. Anti-Freeze Loops: The capacity shall not exceed 80 gallons.~~

~~6. Separate Water Supply: A separate water lead-in for the fire sprinkler system along with an approved (by the local water authority) back-flow prevention device is required. The back-flow prevention device shall be located at the street with in an approved insulated enclosure. The lead-in shall be sized using the minimum pipe size available that provides the calculated flow.~~

~~7. Control Valves: All valves used to control the sprinkler system are required to be indicating. A Post Indicator Valve (PIV) is not permitted.~~

~~8. Electrical Supervision: When required by the fire code official, the main control valves shall be electrically supervised. The back-flow valves are not required to be electrically supervised.~~

~~9. Fire Pumps: Electric fire pumps normally accepted in NFPA û13D systems for residential use (UL listed jockey pump) are acceptable.~~

~~10. Notification Devices: Interior B One (1) interior horn/strobe shall be installed in a location specified by the homeowner. Exterior B One (1) exterior horn/strobe shall be located above the FDC or other acceptable location. The sprinkler flow switch shall activate both of the required devices.~~

~~11. Residential Sprinkler Heads: Residential sprinkler heads shall be utilized and the design allowances specified in section 11.2.3.2.3.1 (reduction to design area) may be applied.~~

~~12. Hangers and Earthquake Bracing: The hanging of sprinkler pipe shall be in accordance Chapter 9. Earthquake bracing is not required.~~

~~13. Garages: Garages shall be classified as Ordinary Hazard Group I. Commercial style QR sprinkler heads are required.~~

~~14. Location of Sprinklers: Sprinklers shall be installed in all areas except where omissions are permitted as follows:~~
~~a. Inaccessible attic spaces. of less than 15,000 sq. ft.~~
~~b. Exterior overhangs, porches, and carports.~~
~~c. Rooms not provided with environmental control.~~

22.38.2 Modified 13 Design Criteria. When Table 21.38.1 requires a Modified 13 Design, the sprinkler system shall be installed to meet the requirements of this code, with the exception of the following items:

1. **Fire Department Connections (FDC): A 2 2-inch fire department connection is required. A single snoot connection will be accepted. The FDC shall be located on the garage wall facing the street except for special circumstances where the FDC may be freestanding and located adjacent to the street or private drive. A freestanding FDC in these circumstances may be designed into the mailbox column.**
2. **Riser Room: Risers shall be located in either the garage or within a dedicated room with an exterior door. Provided the garage/room is fully insulated the requirement for maintaining 40F will not require a source of heat.**
3. **Inspectors Test Connection: The inspectors test location may be piped off the system riser.**
4. **Piping in locations less than 40F: Dry pipe systems are not permitted for the protection of living spaces, anti-freeze systems shall be used. The protection of non-living spaces such as attics may be protected by dry-pipe systems.**
5. **Anti-Freeze Loops: The capacity shall not exceed 80 gallons.**
6. **Separate Water Supply: A separate water lead-in for the fire sprinkler system along with an approved (by the local water authority) back-flow prevention device is required. The back-flow prevention device shall be located at the street with in an approved insulated enclosure. The lead-in shall be sized using the minimum pipe size available that provides the calculated flow.**
7. **Control Valves: All valves used to control the sprinkler system are required to be indicating. A Post Indicator Valve (PIV) is not permitted.**

8. **Electrical Supervision: When required by the fire code official, the main control valves shall be electrically supervised. The back-flow valves are not required to be electrically supervised.**

9. **Fire Pumps: Electric fire pumps normally accepted in NFPA û13D systems for residential use (UL listed jockey pump) are acceptable.**

10. **Notification Devices: Interior B One (1) interior horn/strobe shall be installed in a location specified by the homeowner. Exterior B One (1) exterior horn/strobe shall be located above the FDC or other acceptable location. The sprinkler flow switch shall activate both of the required devices.**

11. **Residential Sprinkler Heads: Residential sprinkler heads shall be utilized and the design allowances specified in section 11.2.3.2.3.1 (reduction to design area) may be applied.**

12. **Hangers and Earthquake Bracing: The hanging of sprinkler pipe shall be in accordance Chapter 9. Earthquake bracing is not required.**

13. **Garages: Garages shall be classified as Ordinary Hazard Group I. Commercial style QR sprinkler heads are required.**

14. **Location of Sprinklers: Sprinklers shall be installed in all areas except where omissions are permitted as follows:**

    a. Inaccessible attic spaces. of less than 15,000 sq. ft.
    b. Exterior overhangs, porches, and carports.
    c. Rooms not provided with environmental control.

NFPA 13D

8.4

Delete CLV amendment Section 8.4 in its entirety and refer to the currently adopted fire code

~~CM 8.4 Matrix for Group R Division 3 Occupancies and buildings~~

~~8.4.1 General. When a sprinkler system is being installed to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access, the design requirements in Table 8.4 shall be applied.~~

~~Table 8.4 Protection~~ Mitigation ~~Matrix for Group R-3 Occupancies[4] and buildings built under the IRC.~~

~~Building Area Size Range[6]~~	~~Mitigation Residential System Type[1,3]~~	~~Separate Sprinkler Lead-in Required[5]~~	~~Minimum Underground Pipe Size[7]~~	~~Minimum Water Meter Size[5]~~	~~Sprinklers Required in Areas Subject to Freezing~~
~~< 3,600 sq.ft.~~	~~Standard~~ ~~NFPA 13D[2]~~	~~No~~	~~1"~~	~~¾"~~	~~No~~
~~≥ 3,600 sq.ft. and~~	~~Enhanced~~	~~No~~	~~1"~~	~~¾"~~	~~No~~

~~< 10,000 sq.ft.~~	~~NFPA 13D [1,2]~~				
~~≥ 10,000 sq.ft. and < 15,000 sf~~	~~Enhanced NFPA 13R [1]~~	~~See NFPA 13R for design requirements~~			
~~≥ 15,000 sf~~	~~Modified NFPA 13 [1]~~	~~See NFPA 13 for design requirements~~			

~~N/A = Not Applicable~~

~~[1] This mitigation constitutes a building Acompletely protected with an approved fire sprinkler system@ per the IFC.~~

~~[2] Domestic demand of 5 gpm is required to be added to the sprinkler demand in the hydraulic calculations.~~

~~[3] Freestanding detached guest houses or garages shall be protected by an Enhanced NFPA 13D system.~~

~~[4] Excluding Group R Division 3 occupancies and buildings built under the IRC used as Group Care Homes.~~

~~[5] U.G. lead-in shall be the minimum size required hydraulically as proven by the sprinkler contractor and shall be hydrostatically tested and flushed, witnessed by the fire dept.~~

~~[6] Building area is defined as all areas under roof except for porches, patios, balconies, carports and porte-cocheres.~~

~~[7] Water meters used for residential sprinkler systems shall be residential fire service meters or other meters approved by the water purveyor~~

8.4 Protection Matrix for Group R Division 3 Occupancies and buildings built under the IRC

8.4.1 General. When a sprinkler system is being installed to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access, the design requirements in Table 8.4 shall be applied.

Table 8.4 Protection Matrix for Group R-3 Occupancies and buildings built under the IRC[4].

Building Area Size Range[6]	Mitigation Residential System Type [1,3]	Separate Sprinkler Lead-in Required [5]	Minimum Underground Pipe Size [7]	Minimum Water Meter Size [5]	Sprinklers Required in Areas Subject to Freezing
< 3,600 sq.ft.	Standard NFPA 13D [2]	No	1"	¾"	No
≥ 3,600 sq.ft. & < 10,000 sq.ft.	Enhanced NFPA 13D [1,2]	No	1"	¾"	No
≥ 10,000 sq.ft. & < 15,000 sf	Enhanced NFPA 13R [1]	See NFPA 13R for design requirements			

≥ 15,000 sf	Modified NFPA 13 [1]	See NFPA 13 for design requirements

N/A = Not Applicable

1 **This mitigation constitutes a building Acompletely protected with an approved fire sprinkler system@ per the IFC.**

2 **Domestic demand of 5 gpm is required to be added to the sprinkler demand in the hydraulic calculations.**

3 **Freestanding detached guest houses or garages shall be protected by an Enhanced NFPA 13D system.**

4 **Excluding Group R Division 3 occupancies and buildings built under the IRC used as Group Care Homes.**

5 **U.G. lead-in shall be the minimum size required hydraulically as proven by the sprinkler contractor and shall be hydrostatically tested and flushed, witnessed by the fire dept.**

6 **Building area is defined as all areas under roof except for porches, patios, balconies, carports and porte-cocheres.**

7. **Water meters used for residential sprinkler systems shall be residential fire service meters or other meters approved by the water purveyor**

NFPA 13R

1.1

Delete CLV amendment Section 1.1 in its entirety

~~**CM 1.1 Scope**~~

~~This standard covers the design and installation of automatic sprinkler systems for protection against fire hazards in residential occupancies up to and including two four stories in height. Residential occupancies three or more stories in height shall be protected throughout in accordance with NFPA 13.~~

~~When sprinkler protection is being provided to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access for single-family residential occupancies, the minimum design criteria shall be as outlined in Section 6.8.5 Protection Matrix for Group R Division 3 Occupancies and buildings built under the IRC. 7.6 Mitigation Matrix for Group R Division 3 Occupancies.~~

1.1 Scope

This standard shall cover the design and installation of automatic sprinkler systems for protection against fire hazards in residential occupancies up to and including two stories in height in buildings not exceeding 60 ft (18 m) in height above grade plane. Residential occupancies three or more stories in height shall be protected throughout in accordance with NFPA 13.

When sprinkler protection is being provided to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access for single-family residential occupancies, the minimum design criteria shall be as outlined in Section 7.6 Protection Matrix for Group R Division 3 Occupancies and buildings built under the IRC.

7.6

Delete CLV amendment Section 7.6 in its entirety and refer to the currently adopted fire code

~~**CM 7.6 Protection Mitigation Matrix for Group R Division 3 Occupancies.** When a sprinkler system is being installed to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access, the design requirements in Table 7.6 shall be applied.~~

~~**Table 7.6**~~

~~**Protection Mitigation Matrix for Group R-3 Occupancies[4] and buildings built under the IRC**~~

~~Building Area Size Range[6]~~	~~Mitigation Residential System Type [1,3]~~	~~Separate Sprinkler Lead-in Required [5]~~	~~Minimum Underground Pipe Size [5]~~	~~Minimum Water Meter Size [5]~~	~~Sprinklers Required in Areas Subject to Freezing~~
~~< 3,600 sq.ft.~~	~~Standard NFPA 13D [2]~~	~~See NFPA 13D for design requirements~~			
~~≥ 3,600 sq.ft. and < 10,000 sq.ft.~~	~~Enhanced NFPA 13D [1,2]~~	~~See NFPA 13D for design requirements~~			
~~≥ 10,000 sq.ft. and <15,000 sq.ft.~~	~~Enhanced NFPA 13R [1]~~	~~Yes~~	~~N/A~~	~~N/A~~	~~Yes~~
~~≥ 15,000 sq.ft.~~	~~Modified NFPA 13 [1]~~	~~See NFPA 13 for design requirements~~			

~~N/A = Not Applicable~~

~~[1] This mitigation constitutes a building Acompletely protected with an approved fire sprinkler system@ per the IFC.~~

~~[2] Domestic demand of 5 gpm is required to be added to the sprinkler demand in the hydraulic calculations.~~

~~[3] Free-standing detached guest houses or garages shall be protected by an Enhanced NFPA 13D system.~~

~~[4] Excluding Group R Division 3 occupancies used as Group Care Homes.~~

~~[5] U.G. lead-in shall be the minimum size required hydraulically as proven by the sprinkler contractor and shall be hydrostatically tested and flushed, witnessed by the fire dept.~~

~~[6] Building area is defined as all areas under roof except for porches, patios, balconies, carports and porte-cocheres.~~

7.6 Protection Matrix for Group R Division 3 Occupancies. When a sprinkler system is being installed to mitigate the minimum Fire Code requirements for fire flow, number of fire hydrants, or fire department access, the design requirements in Table 7.6 shall be applied.

Table 7.6 Protection Matrix for Group R-3 Occupancies and buildings built under the IRC[4]

Building Area Size Range[6]	Mitigation Residential System Type [1,3]	Separate Sprinkler Lead-in Required [5]	Minimum Underground Pipe Size [5]	Minimum Water Meter Size [5]	Sprinklers Required in Areas Subject to Freezing
< 3,600 sq.ft.	Standard NFPA 13D [2]	See NFPA 13D for design requirements			
≥ 3,600 sq.ft. & < 10,000 sq.ft.	Enhanced NFPA 13D [1,2]	See NFPA 13D for design requirements			
≥ 10,000 sq.ft.& <15,000 sq.ft.	Enhanced NFPA 13R [1]	Yes	N/A	N/A	Yes
≥ 15,000 sq.ft.	Modified NFPA 13 [1]	See NFPA 13 for design requirements			

N/A = Not Applicable

1 This mitigation constitutes a building Acompletely protected with an approved fire sprinkler system@ per the IFC.

2 Domestic demand of 5 gpm is required to be added to the sprinkler demand in the hydraulic calculations.

3 Free-standing detached guest houses or garages shall be protected by an Enhanced NFPA 13D system.

4 Excluding Group R Division 3 occupancies used as Group Care Homes.

5 U.G. lead-in shall be the minimum size required hydraulically as proven by the sprinkler contractor and shall be hydrostatically tested and flushed, witnessed by the fire dept.

6 Building area is defined as all areas under roof except for porches, patios, balconies, carports and porte-cocheres.

NFPA 14

5.2.1.2.1

Delete CLV amendment removing Section 5.2.1.2.1 in its entirety and refer to the currently adopted code

5.2.1.2.1* Piping volume shall not be limited where the system is designed in accordance with Section 5.2.1.2.2.

5.2.1.2.2

Delete CLV amendment removing Section 5.2.1.2.2 in its entirety and refer to the currently adopted code

5.2.1.2.2 System design shall be such that water is delivered to the system at the most remote hose connection in not more than 3 minutes, starting at the normal air pressure on the system and at the time of fully opened hose connection

7.2.4

Delete CLV amendment Section 7.2.4 in its entirety and refer to the currently adopted code

~~7.2.4 The fire code official shall be consulted regarding the use and configuration of system pressure regulating devices Where more than two hose connections are used downstream of a pressure-regulating device, the following conditions shall apply:~~

~~7.2.4. For each pressure-regulating device provided, a secondary pressure-regulating device matching the primary device shall be provided in parallel configuration.~~

1. ~~In systems with multiple zones, pressure-regulating device(s) shall be permitted to be used in lieu of providing separate pumps to control pressure in the lower zone(s) as long as the devices comply with all requirements in 7.2.4. When the system is such that a pressure-regulating device os the single source of water to a s structure of pressure zone. For each pressure-regulating device provided, a secondary pressure-regulating device matching the primary device shall be provided in parallel configuration.~~

2. ~~A method to isolate each of the pressure-regulating device(s) shall be provided for maintenance and repair by providing control valves on the supply and discharge side of each pressure-regulating device, in a manner where only the device being maintained and repaired is out of service.~~

3. ~~Regulating devices shall be arranged so that the failure of any single device does not allow pressure in excess of 200 psi (13.9 bar) to any of the multiple hose connections downstream.~~

4. ~~An equally sized bypass around the pressure regulating device(s), with a normally closed valve, shall be installed.~~

5. ~~Pressure-regulating device(s) and the bypass valve shall be installed not more than 7ft 6in (2.31 m) above the floor.~~

6. ~~The pressure-regulating device shall be provided with inlet and outlet pressure gauges.~~

7. ~~The fire department connection(s) shall be connected between the system fire pump(s) and the pressureregulating device(s) and shall be sized and designed to allow the fire department connection to match the pressure and flow from the fire pump~~

8. ~~The pressure-regulating device shall be provided with a pressure relief valve sized for the full anticipated system flow and capable of maintaining downstream system pressures below the maximum pressure ratings for all system components.~~

9. ~~Remote monitoring and supervision for detecting high pressure failure of the pressure of the pressureregulating device shall be provided in accordance with NFPA 72, National Fire Alarm Code. Such failure shall be detected by providing a supervisory flow switch downstream on the pressure relief valve.~~

10. ~~A drain sufficient to allow flow of the full anticipated system flow shall be provided adjacent to the pressure-regulating devices. Use of this drain line for discharge from the pressure relief valve shall be permitted~~

7.2.4 Where more than two hose connections are used downstream of a pressure-regulating device, the following conditions shall apply:

1. **In systems with multiple zones, pressure-regulating device(s) shall be permitted to be used in lieu of providing separate pumps to control pressure in the lower zone(s) as long as the devices comply with all requirements in 7.2.4. For each pressure-regulating device provided, a secondary pressure-regulating device matching the primary device shall be provided in parallel configuration.**

2. **A method to isolate each of the pressure-regulating device(s) shall be provided for maintenance and repair by providing control valves on the supply and discharge side of each pressure-regulating device, in a manner where only the device being maintained and repaired is out of service.**

3. **Regulating devices shall be arranged so that the failure of any single device does not allow pressure in excess of 200 psi (13.9 bar) to any of the multiple hose connections downstream.**

4. **An equally sized bypass around the pressure regulating device(s), with a normally closed valve, shall be installed.**

5. **Pressure-regulating device(s) and the bypass valve shall be installed not more than 7ft 6in (2.31 m) above the floor.**

6. **The pressure-regulating device shall be provided with inlet and outlet pressure gauges.**

7. **The fire department connection(s) shall be connected between the system fire pump(s) and the pressure regulating device(s) and shall be sized and designed to allow the fire department connection to match the pressure and flow from the fire pump**

8. **The pressure-regulating device shall be provided with a pressure relief valve sized for the full anticipated system flow and capable of maintaining downstream system pressures below the maximum pressure ratings for all system components.**

9. **Remote monitoring and supervision for detecting high pressure failure of the pressure of the pressure regulating device shall be provided in accordance with NFPA 72, National Fire Alarm Code. Such failure shall be detected by providing a supervisory flow switch downstream on the pressure relief valve.**

10. **A drain sufficient to allow flow of the full anticipated system flow shall be provided adjacent to the pressure-regulating devices. Use of this drain line for discharge from the pressure relief valve shall be permitted**

NFPA 72

10.10.1.1

Add Section 10.10.1.1 as follows:
Where applicable, the activation of the fire alarm system shall stop any conflicting or confusing sounds and visual distractions; and where house lights are dimmed, cause illumination of the means of egress with light not less than 1 foot-candle (11 lux) at the walking surface level.

18.5.5.8

Delete CLV amendment Section 18.5.5.8 in its entirety and refer to the currently adopted code

~~**CM 18.5.5.8** Ceiling mounted visual appliances shall be provided in rooms and areas used for exhibition purposes, or in rooms and areas where racks or shelving that exceed 5' in height are expected to be installed, or in rooms and areas where wall-mounted devices may become obstructed.~~

~~**Exceptions:**~~

~~1. When approved by the Authority Having Jurisdiction, wall mounted appliances may be installed above the visible obstruction height.~~

~~2. When approved by the Authority Having Jurisdiction, visible notification appliances may be installed in accordance with the requirements of the approved design documents (Fire Protection report) and the manufacturer's instructions in order to achieve the required performance objective.~~

18.5.5.8 Ceiling-mounted visual appliances shall be provided in rooms and areas used for exhibition purposes, or in rooms and areas where racks or shelving that exceed 5 feet in height are expected to be installed, or in rooms and areas where wall-mounted devices may become obstructed.